

REPORT BY THE
AUDITOR GENERAL
OF CALIFORNIA

A REVIEW OF
PUBLIC BUS OPERATIONS IN CALIFORNIA

P-777.1, VOLUME 1

SEPTEMBER 1989

REPORT BY THE
OFFICE OF THE AUDITOR GENERAL

P-777.1, VOLUME 1
A REVIEW OF
PUBLIC BUS OPERATIONS IN CALIFORNIA

SEPTEMBER 1989



Telephone:
(916) 445-0255

STATE OF CALIFORNIA
Office of the Auditor General
660 J STREET, SUITE 300
SACRAMENTO, CA 95814

Kurt R. Sjoberg
Acting Auditor General

September 14, 1989

P-777.1

Honorable Elihu M. Harris, Chairman
Members, Joint Legislative
Audit Committee
State Capitol, Room 2148
Sacramento, California 95814

Dear Mr. Chairman and Members:

The Office of the Auditor General presents its report concerning trends in fiscal operations and performance for public bus operators statewide. The report also discusses maintenance trends, procurement practices, the extent of privatization, and hiring and training practices of a selected number of public bus operators.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kurt Sjoberg".

KURT R. SJÖBERG
Acting Auditor General

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY OF PRINCIPAL ISSUES	S-1
INTRODUCTION	i-1
ANALYSIS	
I THERE WAS NO NOTABLE DECLINE IN THE FISCAL OPERATIONS OF PUBLIC BUS OPERATORS	I-1
II TRENDS IN THE PERFORMANCE OF PUBLIC BUS OPERATORS	II-1
CONCLUSION	II-25
RECOMMENDATION	II-26
III VEHICLE MAINTENANCE COSTS INCREASED FOR SEVEN OF EIGHT PUBLIC BUS OPERATORS WHILE MOST OF THE OPERATORS' VEHICLE MAINTENANCE PROGRAMS APPEARED TO BE IMPROVING	III-1
IV THREE OF FOUR PUBLIC BUS OPERATORS DID NOT ALWAYS FOLLOW A COMPETITIVE PROCUREMENT PROCESS	IV-1
CONCLUSION	IV-10
RECOMMENDATION	IV-11
V INFORMATION ON PRIVATE SECTOR PARTICIPATION IN THE PROVISION OF PUBLIC BUS SERVICE	V-1
VI BUS DRIVER HIRING AND TRAINING PRACTICES AND OTHER RELATED INFORMATION	VI-1
APPENDIX	
GLOSSARY OF TERMS	APX-1
RESPONSES TO THE OFFICE OF THE AUDITOR GENERAL'S REPORT	
Southern California Rapid Transit District	R-3
Alameda-Contra Costa Transit District	R-9
San Diego Transit Corporation	R-13
San Mateo County Transit District	R-15
Omnitrans	R-23
City of Vallejo	R-25

SUMMARY OF PRINCIPAL ISSUES

The main purpose of this review was to identify and analyze trends in the fiscal condition and operational performance of California public bus operators statewide and trends in the vehicle maintenance performance of eight California public bus operators. In addition, we reviewed private sector participation in the transit operations of the eight bus operators. Further, we reviewed the driver hiring and training practices and the procurement practices of four of the eight bus operators.

BACKGROUND

Public transit systems provide transportation services to the public on a regular and continuing basis. Recognizing that an efficient and orderly movement of people within urban areas is necessary to the welfare and the vitality of the public, both the federal and state governments provide subsidies to transit operators in California. In addition, transit operators receive subsidies from local taxes. In fiscal year 1987-88, 109 transit operators provided bus service in California and served approximately 842 million passengers. These 842 million passengers represent 75.9 percent of the 1.11 billion passengers carried by public transit statewide in fiscal year 1987-88. (Because this report includes technical terms related to public transit, we have provided a glossary as an appendix.)

THERE WAS NO NOTABLE DECLINE IN THE
FISCAL OPERATIONS OF PUBLIC BUS OPERATORS

Although total operating costs for bus service provided by transit operators statewide increased slightly more than operating revenues and subsidies from fiscal year 1984-85 through fiscal year 1987-88, generally, there was no notable decline in the fiscal operations of operators. Specifically, operating costs statewide increased 13.1 percent, which is slightly more than the 11.8 percent increase in operating revenues and subsidies statewide. For the same period, the statewide consumer price index (CPI) increased 12.3 percent. In addition, operating revenues and subsidies for 36 (60 percent) of the 60 operators increased faster than operating costs. Further, 42 (70 percent) of the operators had surpluses or balanced budgets in both fiscal years 1984-85 and 1987-88. Nearly 90.0 percent of the total operating cost increase for operators statewide is explained by a 16.4 percent increase in wages and benefits. Although larger operators spent proportionately more for wages and benefits in fiscal year 1987-88 while smaller operators spent proportionately more on purchased transportation and services, the cost of wages and benefits increased an average of 24.1 percent for smaller operators from fiscal year 1984-85 through fiscal year 1987-88. This increase was substantially more than the 15.6 percent increase in these costs for the larger operators. In addition, in fiscal year 1987-88, the transit operators statewide relied on federal and state subsidies to a lesser extent and on passenger fare revenue and local Transportation Development Act (TDA) subsidies to a greater extent than

they did in fiscal year 1984-85. For the larger operators, more funding came from passenger fare revenue and less came from local TDA subsidies than it did for the smaller operators.

TRENDS IN THE PERFORMANCE OF PUBLIC BUS OPERATORS

The TDA requires that all public transit operators use five performance indicators to measure the efficiency and effectiveness of their operations. These indicators are based upon five types of statistics: number of passengers, operating costs, vehicle revenue hours, vehicle revenue miles, and number of employees. Using the TDA statistics we determined that, from fiscal year 1984-85 through fiscal year 1987-88, the number of passengers for public bus operators statewide decreased 11.6 percent while service, as measured by vehicle revenue miles, increased 0.5 percent. Further, operating costs statewide increased 13.1 percent. For most of these statistics, we noticed a relationship to operator size. Specifically, from fiscal year 1984-85 through fiscal year 1987-88, for the larger transit operators, the number of passengers decreased 13.5 percent, vehicle revenue miles decreased 1.8 percent, and operating costs increased 11.5 percent. In contrast, for the smaller transit operators, the number of passengers increased 6.9 percent, vehicle revenue miles increased 8.9 percent, and operating costs increased 24.7 percent.

Also, using the TDA indicators, we determined that, from fiscal year 1984-85 through fiscal year 1987-88, operating costs per passenger increased 30.2 percent, more than the 12.3 percent increase in the statewide CPI; however, operating costs per vehicle revenue hour increased 7.0 percent, which is less than the increase in the CPI. Moreover, passengers per vehicle revenue hour decreased 15.8 percent, passengers per vehicle revenue mile decreased 11.1 percent, and vehicle revenue hours per full-time equivalent (FTE) employee decreased 0.6 percent.

In addition, from fiscal year 1984-85 through fiscal year 1987-88, public bus operators statewide drove 5.1 percent more vehicle revenue hours even though they drove only 0.5 percent more vehicle revenue miles. Increased traffic congestion is a factor that appears to have influenced the difference in the rates of increase between vehicle revenue hours and vehicle revenue miles. Because increased traffic congestion may influence vehicle revenue hours as a measure of service, we also used vehicle revenue miles, which are also a measure of service and appear to be less influenced by traffic congestion. We then calculated and analyzed operating costs per vehicle revenue mile, vehicle revenue miles per FTE employee, and vehicle revenue miles per vehicle revenue hour (average speed), which are not TDA-related performance indicators. From fiscal year 1984-85 through fiscal year 1987-88, operating costs per vehicle revenue mile increased 11.3 percent, vehicle revenue miles per FTE employee decreased 5.0 percent, and vehicle revenue miles per vehicle revenue hour decreased 4.3 percent.

Finally, because neither the larger nor the smaller operators consistently followed the statewide trends in performance indicators over the four-year review period, we determined that trends were not related to operator size. However, in fiscal year 1987-88, we did note a relationship between operator size and most performance indicators. For example, the larger operators had lower operating costs per passenger and higher operating costs per vehicle revenue hour and vehicle revenue mile than smaller operators had.

VEHICLE MAINTENANCE COSTS INCREASED FOR
SEVEN OF EIGHT PUBLIC BUS OPERATORS WHILE
MOST OF THE OPERATORS' VEHICLE MAINTENANCE
PROGRAMS APPEARED TO BE IMPROVING

From fiscal year 1984-85 through fiscal year 1987-88, the total costs of vehicle maintenance at seven of the eight operators we reviewed in more depth increased while most operators reduced the size of their total fleets, and the average age of most operators' fleets increased. The increase in vehicle maintenance costs, coupled with the general reduction in fleet size, resulted in seven of the eight operators having increases in their vehicle maintenance costs per bus that exceeded the increase in the CPI for their respective areas.

In addition, as a result of the greater increase in vehicle maintenance costs relative to smaller increases in the total number of miles driven, the vehicle maintenance costs per vehicle mile increased at three of the four larger operators and three of the four smaller

operators we reviewed. For four of the eight operators, the increases in vehicle maintenance costs per vehicle revenue mile exceeded the increase in the CPI for their respective areas. These increases in vehicle maintenance costs are partially explained by the fact that the operators generally drive an older fleet of buses increasingly more miles. Older buses with higher mileage often require more maintenance, such as the replacement of engines and transmissions.

Moreover, some operators increased or enhanced their routine vehicle maintenance service and inspections, thus, increasing their costs. Finally, the mileage intervals between road calls due to mechanical failure increased for six of the eight operators, indicating that increased vehicle maintenance costs may have had a positive effect on operators' maintenance programs.

**THREE OF FOUR PUBLIC BUS OPERATORS
DID NOT ALWAYS FOLLOW A
COMPETITIVE PROCUREMENT PROCESS**

In our review of the competitive procurement practices of four transit operators, we determined that three transit operators did not always provide for competitive procurement of materials, supplies, and services. Out of a total of \$38,823,888 in procurements that we reviewed for four transit operators, we determined that, during fiscal year 1987-88, three operators spent \$2,022,778 for procurements without obtaining competitive bids or price quotes. However, the intent of federal and state requirements for transit operators is to provide for a competitive procurement process.

When transit operators do not obtain competitive bids or price quotes, they may not always purchase materials, supplies, and services at the lowest possible cost and they do not afford all vendors an opportunity to obtain the operator's business. Further, transit operators that fail to follow federal procurement requirements jeopardize their eligibility for federal subsidies.

INFORMATION ON PRIVATE SECTOR
PARTICIPATION IN THE PROVISION
OF PUBLIC BUS SERVICE

The federal government encourages transit operators receiving Urban Mass Transportation Administration (UMTA) funds to contract with private contractors to operate public bus service. Of the eight operators we reviewed in more depth, two contracted with private contractors to provide bus service in fiscal year 1987-88. In addition, in the same year, the six operators that provided demand-response service contracted with private contractors to provide most of this service. (For all eight operators, bus service was 99.2 percent of both types of service.) Finally, in reviewing the UMTA's most recent evaluations of four of the eight operators, we found that the operators complied with the private sector participation requirements cited in the UMTA Circular 7005.1 even though the operators had contracted with private contractors for very little of the total cost of providing transit service. (Contracted service accounted for 1.7 percent of the eight operators' total costs of providing the two types of transit service in fiscal year 1987-88.)

**BUS DRIVER HIRING AND TRAINING PRACTICES
AND OTHER RELATED INFORMATION**

In our review of the hiring and training practices of four public transit operators and the private contractor with which one of these public operators contracted, we noted practices common to all four operators and the contractor. For example, their hiring practices required applicants to have reached a minimum age, to possess a valid California driver's license, to provide a driving history printout from the California Department of Motor Vehicles, and to undergo a physical examination (including a substance abuse test) and a criminal history check. We also found common elements in the four operators' and the contractor's initial training programs for student bus drivers, such as classroom instruction, training on a bus, progress tests, and written examinations.

Although the initial training programs for student bus drivers were similar for the operators and the contractor, there were some differences in the operators' and the contractor's remedial and advanced training programs for bus drivers. For example, three of the operators and the contractor required bus drivers to take a remedial course after having one or two preventable accidents, and two of the public operators required their bus drivers to complete training courses in interpersonal skills. Some of the public operators and the private contractor also required drivers to complete remedial courses whenever driving skill deficiencies were noted or when the operator or private contractor received a complaint against the driver.

Further, in reviewing data on preventable accidents, we noted that, from fiscal year 1985-86 through fiscal year 1987-88, the number of preventable accidents decreased slightly for all three of the operators for which we had complete data. Finally, we noted that bus driver wage and benefit payments varied among the four operators and the contractor during fiscal year 1987-88.

RECOMMENDATIONS

To ensure that increased traffic congestion does not adversely affect the measurement and evaluation of transit performance, the Legislature should amend the California Public Utilities Code to add operating costs per vehicle revenue mile, vehicle revenue miles per full-time equivalent employee, and vehicle revenue miles per vehicle revenue hour (average speed) to the existing performance indicators.

The three operators that did not always follow a competitive procurement process should adhere to all applicable federal and state competitive procurement requirements to consistently obtain materials, supplies, and services economically and to afford more vendors the opportunity to obtain the transit operators' business.

AGENCY COMMENTS

The eight public bus operators we reviewed generally concurred or did not disagree with the information and findings in the report. One larger operator had comments on our recommendation to amend the California Public Utilities Code to add performance indicators based upon vehicle revenue miles. Another larger operator did not fully agree with our finding regarding its procurement practices.

INTRODUCTION

The main purpose of this review was to identify and analyze trends in the fiscal condition and operational and vehicle maintenance performance of a selected number of public transit operators and public transit operators statewide. We have divided this report into two volumes. Volume 1 contains information on the fiscal and operational trends among the public transit operators statewide. It also contains information on vehicle maintenance trends for eight operators we reviewed in more depth. Moreover, for certain operators, it contains information on procurement practices; private sector participation in the provision of public transit services; and bus driver hiring and training practices, preventable accidents, and wages and benefits. Volume 2 of this report presents more detailed information on the eight individual operators that we reviewed in more depth. Because this report includes technical terms related to public transit, we have provided a glossary of terms as an appendix.

Public transit systems provide transportation services to the public on a regular and continuing basis. Public transit has served the citizens of California for over a century. In California, public transit operators include transit districts, municipal operators, and transit development boards that provide bus, van, rail, ferryboat, and other services. This review is concerned with scheduled bus service (bus service) except in Chapter V, where we also discuss

demand-response service. Transit operators provide bus service according to a regular schedule over a prescribed route while they provide demand-response service in response to requests from the public for transportation that is not available on regularly scheduled routes.

Of the various forms of public transit, bus service is the most widely used. In fiscal year 1987-88, 109 operators in California provided bus service and carried approximately 842 million passengers. These 842 million passengers represent 75.9 percent of the 1.11 billion passengers carried by public transit statewide in fiscal year 1987-88. While the number of passengers using all forms of public transit statewide declined 4.9 percent from fiscal year 1984-85 through fiscal year 1987-88, this overall decline is, in part, due to a 10.2 percent decrease in the number of passengers using bus service. However, over the same period, the number of passengers using light rail and trolley bus services increased 22.6 percent. To the extent that bus and light rail compete for the same passengers, light rail could result in a decrease in the number of bus service passengers carried statewide.

Both the federal and state governments recognize that an efficient and orderly movement of people and goods within urban areas is necessary to the welfare and the vitality of the public. In addition, because urban areas often transcend the boundaries of local jurisdictions, the planning of urban transportation systems must be coordinated at a level higher than each individual local government.

As a result, both the federal and state governments provide financial support for the planning and development of regional public transit systems.

In 1964, the United States Congress found that federal efforts to solve other urban problems were jeopardized because the existing public transit system was deteriorating and no longer adequate. As a result, the federal government enacted the Urban Mass Transportation Act of 1964 to provide financial assistance for the development of efficient and coordinated public transit systems. This assistance includes grants and loans to states and local public entities to finance the acquisition, reconstruction, and improvement of public transit facilities and equipment in urban areas. Recipients of these federal funds annually submit statistics regarding their transit operations to the Urban Mass Transportation Administration (UMTA) in reports called Section 15 reports. To receive the federal funds, urban areas must have a continuing, cooperative, and comprehensive transportation planning process that results in plans and programs consistent with the planned development of the urban areas. As a result, the State established and the federal government recognized metropolitan planning organizations as forums for making cooperative transportation decisions.

Similarly, in 1971, the California Legislature concluded that public transit is an essential component of a balanced transportation system, which must be developed and maintained to permit an efficient

and orderly movement of people and goods in the urban areas of California. The State enacted the Transportation Development Act (TDA), Public Utilities Code, Section 99200 et seq., which provides funding to public transit operators through 43 regional transportation planning agencies (RTPAs). Each statutorily created RTPA, which is either an agency, council of government, or local transportation commission, distributes the funds to recipients in the counties under its jurisdiction.

In addition to the RTPAs, there are county transportation commissions in four counties--Los Angeles, Orange, San Bernardino, and Riverside--and one metropolitan transit development board in San Diego County that must give prior approval to all TDA distributions made by the RTPA covering their service areas. Recipients of TDA funds must annually report statistics relating to their transit operations to the State Controller's Office in an annual report of financial transactions.

An increased demand for public transit services may occur as a result of increased concern about air quality in urban areas. The South Coast Air Quality Management District adopted Regulation XV, which became effective in 1988 and is intended to improve air quality in Southern California by requiring employers of 100 or more employees per work site to develop and implement a plan to increase the average number of passengers per vehicle driven to work.

SCOPE AND METHODOLOGY

The main purpose of our review for this volume of the report was to identify and analyze trends in the fiscal condition and operational performance of public transit operators statewide and also trends in the vehicle maintenance performance of a selected number of public transit operators. Moreover, for certain operators, this volume contains information on procurement practices; private sector participation in the provision of public transit services; and bus driver hiring and training practices, preventable accidents, and wages and benefits.

For the financial chapter (Chapter I) of this volume, we compiled financial information on bus service for transit operators statewide for fiscal years 1984-85 and 1987-88. We were able to isolate financial data related to bus service for only 60 of the 109 bus service operators statewide. To analyze financial, operational, and vehicle maintenance performance trends, we compared changes in transit costs and cost-related indicators with inflation, as measured by changes in the consumer price index (CPI). Although there may be limitations inherent in this comparison, it provides an indication of an operator's performance compared with the effect of inflation during our review period. In addition, we observed that transit operators themselves use changes in the CPI as a basis for comparing changes in transit costs. We obtained both statewide and area-specific CPI data from the U. S. Department of Labor, Bureau of Labor Statistics. We

also conducted analyses to determine if there was a statistical relationship between the size of operators and various financial data. We did not review the various regulations, policies, or procedures regarding the allocation of federal, state, or local subsidies or the allocation practices of the various governmental entities.

For the performance chapter (Chapter II) of this volume, we compiled information on the operational performance of bus service operators statewide for fiscal years 1984-85 and 1987-88. Further, we conducted analyses to determine if there was a statistical relationship between operator size and performance indicators, including those required by the TDA. The number of operators statewide varies from 60 to 97 for performance statistics and indicators because data were not always available for all the operators that provide bus service in California.

However, when we attempted to analyze vehicle maintenance trends for bus service operators statewide for the vehicle maintenance chapter (Chapter III) of this volume, statewide data were not available. Therefore, for the period from fiscal year 1984-85 through fiscal year 1987-88, we analyzed vehicle maintenance trends for eight operators we reviewed in more depth.

Because transit operators in any specific area are affected by numerous variables such as geography, economy, and local laws, accurate comparisons of the fiscal condition and operational and vehicle

maintenance performance of operators are not possible. Therefore, in this report, we did not attempt to compare operators with each other. Instead, we compare operators against their own performance over time.

To calculate data for statewide operations for the financial and operational performance chapters of this volume, we combined the data we collected for the eight operators with statistics reported to the State Controller's Office by other bus service operators in the State. Also, we analyzed the eight operators we reviewed in more depth for the possible causes of various statewide trends.

In addition, for the financial and operational performance chapters, we identified statewide trends that differed between larger operators and smaller operators. We classified operators statewide according to the number of passengers carried by the operator in fiscal year 1987-88. For each group, we identified financial and operational performance trends. Moreover, for the vehicle maintenance chapter, we identified trends that differed between larger operators and smaller operators for the eight operators we reviewed in more depth. We based the size classification of operators on the number of passengers served. For the purpose of this review, we defined larger operators as those operators serving at least 10 million passengers annually and smaller operators as those serving fewer than 10 million passengers annually.

For the chapter on procurement practices (Chapter IV) of this volume, we reviewed in greater detail the four larger operators of the eight we reviewed in more depth. We determined whether the four larger operators followed a competitive procurement process when purchasing materials, supplies, and services. We did not compile data for the four smaller operators because of time constraints.

For the chapter of this volume on private sector participation (Chapter V), we reviewed records of the eight public transit operators we reviewed in more depth to determine the extent to which they contracted with private companies to provide bus service and demand-response service. In addition, we reviewed the UMTA's most recent evaluations of four of the eight operators to determine whether, according to the UMTA, the operators complied with the UMTA's requirements for privatization.

Finally, for the chapter of this volume where we present information on bus driver hiring and training, preventable accidents, and wages and benefits (Chapter VI), we reviewed in greater detail the four larger of the eight operators we reviewed in more depth. For the private contractor of one of the operators, we also presented information on bus driver hiring and training programs and wages and benefits. We did not compile data for the four smaller operators because of time constraints.

In selecting the sample of eight operators for our review, we chose four from Northern California--the Alameda-Contra Costa Transit District (AC Transit), the San Mateo County Transit District (SamTrans), the Stockton Metropolitan Transit District (SMART), and the City of Vallejo (Vallejo)--and four from Southern California--the Southern California Rapid Transit District (SCRTD), the San Diego Transit Corporation (SDTC), Omnitrans, located in San Bernardino County, and the Torrance Transit System (Torrance). These eight operators served 529 million (62.8 percent) of the 842 million people who used bus service in California during fiscal year 1987-88. Table i-1 shows the eight operators we reviewed, the number of passengers they served, and their operating costs for fiscal year 1987-88.

TABLE i-1

**NUMBER OF PASSENGERS AND OPERATING COSTS
FOR EIGHT PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88**

<u>Transit Operators</u>	<u>Number of Passengers</u>	<u>Operating Costs</u>
Southern California Rapid Transit District	416,634,000	\$508,342,000
Alameda-Contra Costa Transit District	57,224,000	122,310,000
San Diego Transit Corporation	26,434,000	40,615,000
San Mateo County Transit District	18,048,000	34,544,000
Omnitrans, located in San Bernardino County	3,865,000	10,954,000
Torrance Transit System	2,797,000	5,789,000
Stockton Metropolitan Transit District	2,565,000	5,719,000
City of Vallejo	<u>1,323,000</u>	<u>2,072,000</u>
Total	<u>528,890,000</u>	<u>\$730,345,000</u>

Sources: Section 15 reports of the Urban Mass Transportation Administration and the annual report of financial transactions of transit operators to the State Controller's Office for fiscal year 1987-88.

For the eight operators we reviewed in more depth, we obtained financial and operational performance information from the annual reports of financial transactions of transit operators submitted by operators to the State Controller's Office; the Section 15 reports

submitted by operators to the UMTA; and the operators' audited financial statements. The information presented in this report was not audited by us. Because the figures occasionally differed among sources, we consulted with the operators to determine the reasons for the differences and, then, identified the most accurate data to use for our analyses. Thus, sources of data may vary from operator to operator. Moreover, the percent changes and unit changes that we present are calculated using the first and last years of our review period. Finally, because the SCRTD bases its fiscal year on 364 days rather than the normal 365 days, every five or six years the SCRTD must include 53 weeks rather than the normal 52 weeks in a fiscal year. This was the case in fiscal year 1987-88. To compare the SCRTD's information for fiscal year 1987-88 with the SCRTD's information for the other years in our review, with the exception of preventable accident information in Chapter VI, we prorated the SCRTD's 1987-88 figures.

ANALYSIS

I

THERE WAS NO NOTABLE DECLINE IN THE FISCAL OPERATIONS OF PUBLIC BUS OPERATORS¹

Although total operating costs for bus service provided by transit operators statewide increased slightly more than operating revenues and subsidies from fiscal year 1984-85 through fiscal year 1987-88, generally, there was no notable decline in the fiscal operations of operators. Specifically, operating costs statewide increased 13.1 percent, which is slightly more than the 11.8 percent increase in operating revenues and subsidies statewide. For the same period, the statewide consumer price index (CPI) increased 12.3 percent. In addition, operating revenues and subsidies for 36 (60 percent) of the 60 operators increased faster than operating costs. Further, 42 (70 percent) of the operators had surpluses or balanced budgets in both fiscal years 1984-85 and 1987-88. Nearly 90.0 percent of the total operating cost increase for operators statewide is explained by a 16.4 percent increase in wages and benefits. Although larger operators spent proportionately more for wages and benefits in fiscal year 1987-88 while smaller operators spent proportionately more on purchased transportation and services, the cost of wages and benefits increased an average of 24.1 percent for the smaller operators from fiscal year 1984-85 through fiscal year

¹See the Appendix for definitions of technical terms used.

1987-88. This increase was substantially more than the 15.6 percent increase in these costs for the larger operators. In addition, in fiscal year 1987-88, the transit operators statewide relied on federal and state subsidies to a lesser extent and on passenger fare revenue and local Transportation Development Act (TDA) subsidies to a greater extent than they did in fiscal year 1984-85. For the larger operators, more funding came from passenger fare revenue and less came from local TDA subsidies than it did for the smaller operators.

BACKGROUND

Transit operators receive operating subsidies from federal, state, and local sources. Operators receive federal subsidies from the Urban Mass Transportation Act and state subsidies from sources that may include the State Transportation Assistance Fund. The major local subsidy is the one-quarter cent sales tax collected under the TDA. Also, some transit operators receive other local subsidies including, in some counties, an additional one-half cent sales tax approved by local voters. In addition to receiving operating subsidies, transit operators also earn income (revenues). Transit operators' major source of revenues is passenger fares while other revenues may include interest and revenue from advertising.

Transit operators statewide incur operating costs that may include wages and benefits for bus drivers, bus maintenance employees, and administrative staff. Operators also may pay for materials,

supplies, and services that are required to maintain and operate their buses and facilities. In addition, some operators contract with other public or private transit operators to provide portions of their bus services.

The TDA requires transit operators to report fiscal information to the State Controller's Office annually. In addition, the federal government requires transit operators receiving federal transportation grants to report their financial condition to the Urban Mass Transportation Administration (UMTA) annually in reports called Section 15 reports. Further, state law requires that each transit operator undergo an independent financial audit each year. For this review, we compiled financial information on bus service from a combination of these sources for 60 transit operators statewide for fiscal years 1984-85 and 1987-88.

In addition to our analysis of the financial operations of 60 operators in total, we analyzed some financial statistics and statewide trends for transit operators according to the size of transit operators, as measured by the number of passengers they served in fiscal year 1987-88. Consequently, we divided the operators into two groups. Six of the 60 operators we classified as larger operators (serving 10 million or more passengers in fiscal year 1987-88), and 54 we classified as smaller operators (serving less than 10 million passengers in fiscal year 1987-88). Among the eight operators we reviewed in more depth, four were larger operators and four were smaller operators.

TRENDS IN TRANSIT OPERATORS' OPERATING COSTS

From fiscal year 1984-85 through fiscal year 1987-88, total operating costs for bus service provided by 60 transit operators statewide increased 13.1 percent, slightly more than the operators' 11.8 percent increase in operating revenues and subsidies. This cost increase was slightly more than the 12.3 percent increase in the statewide CPI. However, the financial operations of most operators did not decline because, in fiscal years 1984-85 and 1987-88, 42 (70 percent) of the 60 operators had either balanced budgets or operating surpluses while 18 (30 percent) of the 60 operators had operating deficits.

In addition, total operating costs for the 60 transit operators in fiscal year 1987-88 exceeded total operating revenues and subsidies by \$6,889,000. However, if we eliminate one larger operator's \$13,438,000 operating deficit in that year, the remaining 59 operators had a total operating surplus of \$6,549,000 in fiscal year 1987-88. Moreover, operating revenues and subsidies for 36 (60 percent) of the operators increased either more or at the same rate as the operators' costs. Further, the number of operators that had operating deficits (18) in fiscal year 1987-88 remained the same as in fiscal year 1984-85. Finally, although transit operators' total operating costs increased slightly more than the statewide CPI from fiscal year 1984-85 through fiscal year 1987-88, the amount of service

provided over the same period by these operators also increased. Specifically, from fiscal year 1984-85 through fiscal year 1987-88, 44 (73.3 percent) of the 60 operators increased vehicle revenue miles while 16 (26.7 percent) decreased vehicle revenue miles.

For the operators statewide, a 16.4 percent increase in wages and benefits from fiscal year 1984-85 through fiscal year 1987-88 accounted for 89.9 percent of the increase in total operating costs. Other operating cost categories that increased included interest paid on debts (47.8 percent), purchased transportation (21.5 percent), and services (11.8 percent). Table I-1 presents a summary of operating revenues, subsidies, and costs for 60 transit operators statewide for fiscal years 1984-85 and 1987-88. This table also summarizes increases and decreases in various categories of operating revenues, subsidies, and costs.

TABLE I-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
 FOR PUBLIC BUS SERVICES FOR
 60 CALIFORNIA TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88
 (UNAUDITED)
 (IN THOUSANDS)

	<u>1984-85</u>	<u>1987-88</u>	<u>Increase (Decrease)</u>	
			<u>Dollar</u>	<u>Percent</u>
Operating Revenues and Subsidies				
Passenger fare revenue	\$208,413	\$275,975	\$ 67,562	32.4%
Other revenue	43,192	36,875	(6,317)	(14.6)
Local Transportation				
Development Act subsidies	201,489	267,982	66,493	33.0
Other local subsidies	191,062	187,812	(3,250)	(1.7)
State subsidies	27,676	1,906	(25,770)	(93.1)
Federal subsidies	90,079	80,996	(9,083)	(10.1)
Total Operating Revenues and Subsidies	<u>761,911</u>	<u>851,546</u>	<u>89,635</u>	11.8
Operating Costs				
Wages and benefits	546,164	635,840	89,676	16.4
Materials and supplies	100,973	104,302	3,329	3.3
Services	40,744	45,549	4,805	11.8
Purchased transportation	10,536	12,799	2,263	21.5
Interest	6,856	10,136	3,280	47.8
Other	53,434	49,809	(3,625)	(6.8)
Total Operating Costs	<u>758,707</u>	<u>858,435</u>	<u>99,728</u>	13.1
Operating Surplus (Deficit)	<u>3,204</u>	<u>(6,889)</u>	<u>(10,093)</u>	<u>(315.0)</u>
Depreciation Expense	(80,074)	(90,669)	(10,595)	13.2
Inventory Adjustment and One-time Cost	<u>0</u>	<u>5,903^a</u>	<u>5,903^a</u>	
Surplus (Deficit) With Depreciation	<u><u>\$(76,870)</u></u>	<u><u>\$(91,655)</u></u>	<u><u>\$(14,785)</u></u>	19.2

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a This number is the sum of two larger operators' inventory adjustment and one-time cost.

Table I-2 shows the proportions of the various components of operating costs for 60 transit operators statewide for fiscal years 1984-85 and 1987-88. As the table illustrates, from fiscal year 1984-85 through fiscal year 1987-88, the proportion of various costs to total operating costs changed relatively little for the operators statewide. In fiscal year 1987-88, wages and benefits accounted for 74.0 percent of total operating costs for the transit operators statewide, up only slightly from 72.0 percent in fiscal year 1984-85. Materials and supplies accounted for 12.2 percent in fiscal year 1987-88, down only slightly from 13.3 percent in fiscal year 1984-85. Purchased transportation, interest, services, and "other" costs accounted for 13.8 percent of the total costs in fiscal year 1987-88 and 14.7 percent in fiscal year 1984-85.

TABLE I-2
**PROPORTIONS OF THE VARIOUS
 COMPONENTS OF OPERATING COSTS
 FOR PUBLIC BUS SERVICES PROVIDED BY
 60 CALIFORNIA TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88
 (UNAUDITED)**

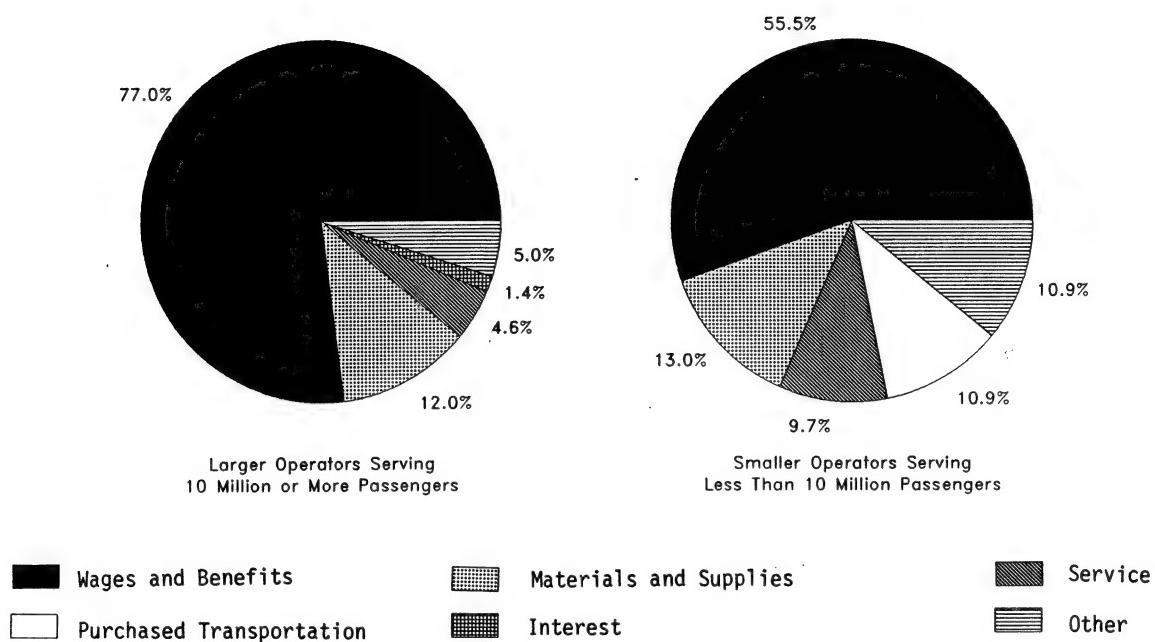
	<u>1984-85</u>	<u>1987-88</u>
Operating Costs		
Wages and benefits	72.0%	74.0%
Materials and supplies	13.3	12.2
Services	5.4	5.3
Purchased transportation	1.4	1.5
Interest	0.9	1.2
Other	<u>7.0</u>	<u>5.8</u>
Total Operating Costs	<u>100.0%</u>	<u>100.0%</u>

Source: Calculated from operating cost figures on Table I-1.

For fiscal year 1987-88, the proportion of each type of cost to total operating costs varied for larger and smaller operators. As Chart I-1 illustrates, larger operators spent proportionally more from the wages and benefits cost category (77.0 percent) in fiscal year 1987-88 than did the smaller operators (55.5 percent).

CHART I-1

**COMPARISON OF THE VARIOUS COMPONENTS
OF OPERATING COSTS BETWEEN 6 LARGER
TRANSIT OPERATORS AND 54 SMALLER
TRANSIT OPERATORS PROVIDING PUBLIC BUS SERVICE
FISCAL YEAR 1987-88**



Source: Computed from figures on tables I-4 and I-5.

A major reason why the larger operators generally spent more from the wages and benefits category than the smaller operators did is that the larger operators did not contract out for transit services as frequently as the smaller operators did. The larger operators

incurred wage and benefit costs for transit service by employing drivers, mechanics, and administrators. In contrast, smaller operators more often contracted for transit services rather than hiring their own employees to provide these services. Portions of the smaller operators' costs for purchased transportation and services included wages and benefits paid to the contractors' employees. For example, in fiscal year 1987-88, 28 of the 54 smaller operators purchased bus services, and the cost of this purchased transportation accounted for 10.9 percent of the smaller operators' total costs. In contrast, none of the larger operators reported any purchased transportation. (One of the four larger operators in our sample of eight operators that we reviewed in more depth did purchase a portion of its transit services from a private contractor; however, the operator classified these costs as services.) Further, two of the four smaller operators we reviewed in more depth contracted for all or part of their bus maintenance services rather than hiring maintenance employees and incurring wage and benefit costs. Costs for these contracted employees were included in the services or purchased transportation cost category. The extent to which public transit operators contracted with private contractors to provide bus and demand-response services is discussed in more depth in Chapter V.

Another reason that the larger operators spent more proportionally from the wage and benefit cost category than the smaller operators did is that the smaller operators did not always report as wages and benefits the cost of personnel time spent administering

purchased transportation and service contracts. Specifically, 11 of the 54 smaller operators reported no wage and benefit costs in fiscal year 1987-88. These 11 operators either did not report administrative costs or included them in the purchased transportation or services categories. Reported costs of purchased transportation and services for these 11 operators totaled \$4.3 million.

The average percent increases in total operating costs and the average percent increases in total operating revenues and subsidies also differed for larger and smaller operators. From fiscal year 1984-85 through fiscal year 1987-88, the larger operators' costs did not increase as much as the smaller operators' costs. Further, the larger operators' operating revenues and subsidies did not increase as much as the smaller operators' operating revenues and subsidies. Table I-3 illustrates the increases from fiscal year 1984-85 through fiscal year 1987-88 in operating revenues, subsidies, and costs according to transit operator size, as measured by the numbers of passengers the operators carried in fiscal year 1987-88.

TABLE I-3

**AVERAGE PERCENT INCREASE IN OPERATING
REVENUES, SUBSIDIES, AND COSTS BY
OPERATOR SIZE FOR 60 PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88**

	<u>Number of Operators</u>	<u>Average Percent Increase in Operating Revenues and Subsidies</u>	<u>Average Percent Increase in Operating Costs</u>
<u>Larger Transit Operators</u>			
50 million passengers and over	2	9.1%	10.6%
10 million to 50 million passengers	4	13.5	17.3
<u>Smaller Transit Operators</u>			
One million to 10 million passengers	15	23.3	22.5
100,000 to one million passengers	19	33.5	35.1
Fewer than 100,000 passengers	20	42.3	43.1

Table I-4 summarizes operating revenues, subsidies, and costs for the larger of the 60 California operators for fiscal years 1984-85 and 1987-88, while Table I-5 summarizes operating revenues, subsidies, and costs for the smaller of the 60 operators for fiscal years 1984-85 and 1987-88. Both tables also show increases and decreases in operating revenues, subsidies, and costs.

TABLE I-4

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR PUBLIC BUS SERVICES PROVIDED BY THE 6 LARGER
OF THE 60 CALIFORNIA TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88
(UNAUDITED)
(IN THOUSANDS)

	<u>1984-85</u>	<u>1987-88</u>	<u>Dollar</u>	<u>Increase (Decrease)</u>
				<u>Percent</u>
Operating Revenues and Subsidies				
Passenger fare revenue	\$187,313	\$250,729	\$ 63,416	33.9%
Other revenue	39,668	32,661	(7,007)	(17.7)
Local Transportation				
Development Act subsidies	160,351	202,447	42,096	26.3
Other local subsidies	184,809	178,677	(6,132)	(3.3)
State subsidies	21,571	1,262	(20,309)	(94.1)
Federal subsidies	<u>70,399</u>	<u>63,373</u>	<u>(7,026)</u>	<u>(10.0)</u>
Total Operating Revenues and Subsidies	<u>664,111</u>	<u>729,149</u>	<u>65,038</u>	9.8
Operating Costs				
Wages and benefits	493,758	570,822	77,064	15.6
Materials and supplies	86,244	89,088	2,844	3.3
Services	32,935	34,249	1,314	4.0
Purchased transportation	0	0	0	0.0
Interest	6,149	10,078	3,929	63.9
Other	<u>45,603</u>	<u>37,000</u>	<u>(8,603)</u>	<u>(18.9)</u>
Total Operating Costs	<u>664,689</u>	<u>741,237</u>	<u>76,548</u>	11.5
Operating Surplus (Deficit)	(578)	(12,088)	(11,510)	1,991.3
Depreciation Expense	(67,673)	(74,375)	(6,702)	9.9
Inventory Adjustment and One-time Cost	<u>0</u>	<u>5,903^a</u>	<u>5,903^a</u>	
Surplus (Deficit) With Depreciation	<u><u>\$(68,251)</u></u>	<u><u>\$(80,560)</u></u>	<u><u>\$(12,309)</u></u>	18.0

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a This number is the sum of two operators' inventory adjustment and one-time cost.

TABLE I-5

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR PUBLIC BUS SERVICES PROVIDED BY THE 54 SMALLER
OF THE 60 CALIFORNIA TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88
(UNAUDITED)
(IN THOUSANDS)

	<u>1984-85</u>	<u>1987-88</u>	<u>Increase (Decrease)</u>	
	<u>1984-85</u>	<u>1987-88</u>	<u>Dollar</u>	<u>Percent</u>
Operating Revenues and Subsidies				
Passenger fare revenue	\$21,100	\$ 25,245	\$ 4,145	19.6%
Other revenue	3,524	4,214	690	19.6
Local Transportation				
Development Act subsidies	41,138	65,535	24,397	59.3
Other local subsidies	6,252	9,136	2,884	46.1
State subsidies	6,105	644	(5,461)	(89.4)
Federal subsidies	<u>19,680</u>	<u>17,623</u>	<u>(2,057)</u>	<u>(10.5)</u>
Total Operating Revenues and Subsidies	<u>97,799</u>	<u>122,397</u>	<u>24,598</u>	25.2
Operating Costs				
Wages and benefits	52,406	65,018	12,612	24.1
Materials and supplies	14,729	15,214	485	3.3
Services	7,809	11,301	3,492	44.7
Purchased transportation	10,536	12,799	2,263	21.5
Interest	707	58	(649)	(91.8)
Other	<u>7,831</u>	<u>12,809</u>	<u>4,978</u>	<u>63.6</u>
Total Operating Costs	<u>94,018</u>	<u>117,199</u>	<u>23,181</u>	24.7
Operating Surplus (Deficit)	3,781	5,198	1,417	37.5
Depreciation Expense	<u>(12,401)</u>	<u>(16,294)</u>	<u>(3,893)</u>	<u>31.4</u>
Surplus (Deficit) With Depreciation	<u><u>\$(8,620)</u></u>	<u><u>\$(11,096)</u></u>	<u><u>\$(2,476)</u></u>	28.7

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

Increases and decreases in specific cost categories from fiscal year 1984-85 through fiscal year 1987-88 also differed for larger and smaller operators. In the following paragraphs, we compare the trends in specific cost categories of the larger operators with the trends in specific cost categories of the smaller operators. In addition, we discuss various causes for increases or decreases in specific cost categories.

Wages and Benefits

Among the 60 transit operators statewide, the larger operators' wages and benefits increased an average of only 15.6 percent while the smaller operators' wages and benefits increased an average of 24.1 percent. One of the reasons that the smaller operators' wages and benefits increased more than those of the larger operators is because the smaller operators' level of service, as measured by vehicle revenue miles, increased while the larger operators' level of service decreased. Specifically, from fiscal year 1984-85 through fiscal year 1987-88, the smaller operators' vehicle revenue miles increased an average of 9.5 percent while the larger operators' vehicle revenue miles decreased an average of 0.5 percent.

In addition, several factors unrelated to operator size contributed to increases in wage and benefit costs. For example, one of the eight operators we reviewed in more depth cited the hiring of additional staff as a factor that increased its wage and benefit

costs. In addition, hourly wage increases were cited by both large and small operators. For example, one of the larger operators increased the top wage rates of its bus drivers 21.3 percent and the top wage rates of its bus mechanics 23.1 percent from fiscal year 1984-85 through fiscal year 1987-88. According to the transit operator, it negotiated increases in drivers' and mechanics' wages to gain control over absenteeism and to make wages more competitive with wages paid by other Bay Area transit operators. Also, two of the larger operators and one of the smaller operators stated that bus driver absenteeism contributed to the total cost of wages and benefits. A consultant for one larger operator estimated that absenteeism cost the operator \$18.6 million annually.

Another factor that contributed to higher wages and benefits for the eight operators was an increase in the cost of employee benefits such as workers' compensation, pension costs, and medical health insurance. For example, one larger operator's cost for workers' compensation increased 117.0 percent from fiscal year 1983-84 through fiscal year 1987-88. Another larger operator cited increases in the costs of both workers' compensation and pensions as factors that increased the operator's total cost for wages and benefits. Further, from fiscal year 1983-84 through fiscal year 1987-88, one larger operator's cost of medical insurance increased 60.3 percent, and one smaller operator also stated that increased costs for health insurance contributed to its increased cost for wages and benefits.

Materials and Supplies

The cost of materials and supplies did not increase significantly (3.3 percent) from fiscal year 1984-85 through fiscal year 1987-88 for either the larger or the smaller operators statewide. According to one operator, a decrease in the cost of fuel contributed to the lower cost of materials and supplies.

Services

From fiscal year 1984-85 through fiscal year 1987-88, the cost of services increased an average of 44.7 percent for the smaller operators, significantly faster than the 12.3 percent increase in the statewide CPI, while the cost of services increased only 4.0 percent for the larger operators. Two of the smaller operators of the eight we reviewed in more depth attributed increases in service costs to increases in the cost of contracted maintenance services. Other causes cited by both larger and smaller operators of the eight we reviewed in more depth included increases in the costs of professional, custodial, and security services.

Purchased Transportation

The cost of purchased transportation increased an average of 21.5 percent for the smaller operators statewide from fiscal year 1984-85 through fiscal year 1987-88. This increase is greater than the

12.3 percent increase in the statewide CPI. None of the larger operators statewide recorded any purchased transportation costs in either fiscal year 1984-85 or fiscal year 1987-88. Although one of the larger operators in our sample of eight contracted with a private operator to provide a portion of its transit service, this operator recorded these costs as services rather than purchased transportation. According to one of the smaller operators in our sample of eight, its costs for purchased transportation increased 35.7 percent as a result, in part, of expanded service.

Interest

Interest cost increased an average of 63.9 percent for the larger operators statewide while it decreased an average of 91.8 percent for the smaller operators statewide. That the larger operators' increase was greater than the 12.3 percent increase in the statewide CPI was due largely to one operator's 2,157.7 percent increase in interest costs. This operator attributed its increase in interest to borrowing money to purchase a building. When this operator is excluded, the average interest cost of the remaining five larger operators statewide increased 37.0 percent. In addition, one of the smaller operators of the eight we reviewed in more depth attributed its 91.5 percent decrease to its reduction of debt and a more timely receipt of federal funds, which reduced the operator's need for short-term loans.

"Other" Costs

"Other" costs increased an average of 63.6 percent for the smaller operators statewide. In contrast, other costs decreased an average of 18.9 percent for larger operators. However, this decrease was due mainly to a decrease of 43.0 percent in one larger operator's other costs. Without the effect of this one larger operator, the other costs of the remaining five larger operators statewide increased an average of 41.2 percent. Both larger and smaller operators from our sample of eight stated that increases in this cost category were the result of a significant increase in casualty and liability expenses. For example, according to one larger operator, its casualty and liability costs increased over 400 percent from fiscal year 1983-84 through fiscal year 1987-88.

TRENDS IN TRANSIT OPERATORS' OPERATING REVENUES AND SUBSIDIES

Total operating revenues and subsidies received for bus services provided by 60 transit operators statewide increased 11.8 percent from fiscal year 1984-85 through fiscal year 1987-88. Both revenue from passenger fares and the Local Transportation Development Act (TDA) subsidies increased for the 60 operators while federal and state subsidies decreased. Operating revenues and subsidies received by the 60 operators in fiscal years 1984-85 and 1987-88 are shown on Table I-1 on page I-6.

Transit operators statewide relied on federal and state funding to a lesser extent and relied on local TDA subsidies and passenger fare revenue to a greater extent in fiscal year 1987-88 than they did in fiscal year 1984-85. Specifically, as shown on Table I-6, in fiscal year 1987-88, passenger fare revenue accounted for 32.4 percent of total operating revenues and subsidies compared with 27.4 percent in fiscal year 1984-85. Similarly, local TDA subsidies accounted for 31.5 percent in fiscal year 1987-88 compared with 26.4 percent in fiscal year 1984-85. In contrast, federal and state subsidies accounted for 9.7 percent of total operating revenues and subsidies in fiscal year 1987-88 compared with 15.4 percent in fiscal year 1984-85.

TABLE I-6

**PROPORTIONS OF THE VARIOUS COMPONENTS
OF OPERATING REVENUES AND SUBSIDIES
FOR PUBLIC BUS SERVICES PROVIDED BY
60 CALIFORNIA TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88
(UNAUDITED)**

	<u>1984-85</u>	<u>1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	27.4%	32.4%
Other revenue	5.7	4.3
Local Transportation Development Act subsidies	26.4	31.5
Other local subsidies	25.1	22.1
State subsidies	3.6	0.2
Federal subsidies	<u>11.8</u>	<u>9.5</u>
Total Operating Revenues and Subsidies	<u>100.0%</u>	<u>100.0%</u>

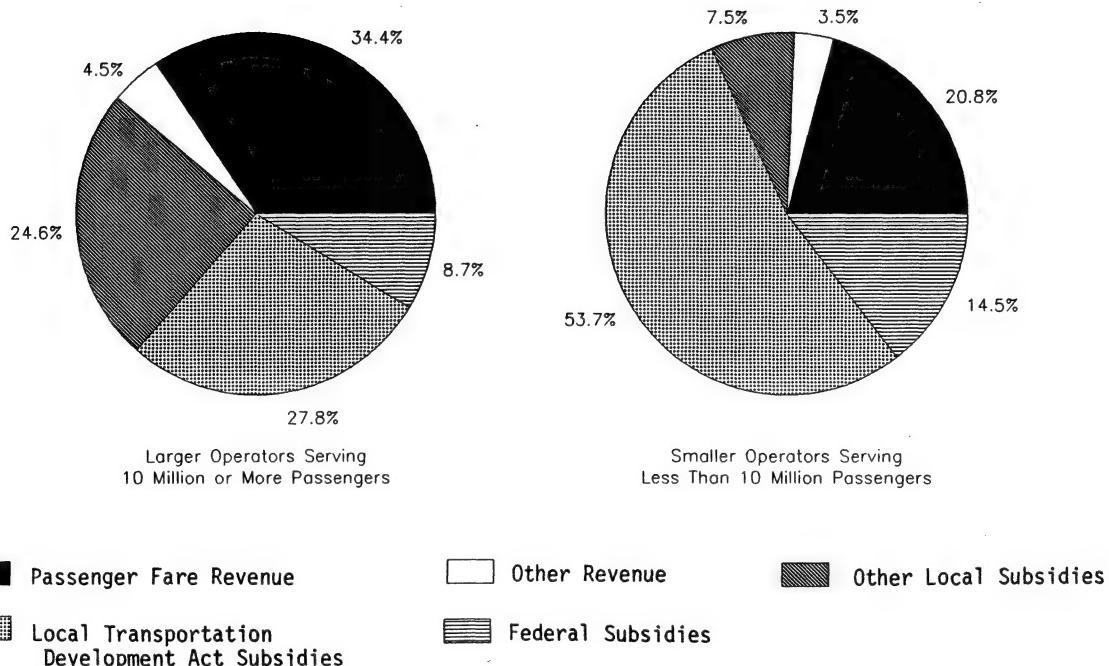
Source: Calculated from operating revenues and subsidies figures on Table I-1.

From fiscal year 1984-85 through fiscal year 1987-88, the proportions of the various sources of total operating revenues and subsidies received in fiscal year 1987-88 varied for larger and smaller operators. Larger operators statewide received a greater proportion of their funds from passenger fare revenue while smaller operators statewide received a greater proportion of their funds from local TDA subsidies. Chart I-2 compares the proportions of various sources of

operating revenues and subsidies for larger operators with the proportions for smaller operators for fiscal year 1987-88.

CHART I-2

**COMPARISON OF THE VARIOUS COMPONENTS OF
OPERATING REVENUES AND SUBSIDIES BETWEEN
6 LARGER TRANSIT OPERATORS AND 54 SMALLER
TRANSIT OPERATORS PROVIDING PUBLIC BUS SERVICE
FISCAL YEAR 1987-88**



Source: Computed from figures on tables I-4 and I-5.

In fiscal year 1987-88, larger operators statewide relied on passenger fare revenue to fund their operations to a greater extent than did smaller operators. In fiscal year 1987-88, passenger fare revenue accounted for 34.4 percent of total operating revenues and subsidies for larger operators. In contrast, for the same year, passenger fare revenue accounted for only 20.8 percent of the total operating revenues and subsidies for the smaller operators. One of the reasons that the larger operators received proportionally more funding from passenger fare revenue was that the larger operators generally charged a higher base fare than did the smaller operators. For example, in our sample of eight operators that we reviewed in more depth, in fiscal year 1987-88, the base fare ranged from \$0.75 to \$1.00 for three of the four larger operators. In contrast, the base fare for the four smaller operators in our sample of eight ranged from \$0.50 to \$0.60. Table I-7 illustrates the proportion of passenger fare revenue to total operating revenues and subsidies by operator size.

TABLE I-7

PASSENGER FARE REVENUE AS A PERCENT
OF TOTAL OPERATING REVENUES AND SUBSIDIES
BY OPERATOR SIZE FOR 60
CALIFORNIA PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88
(UNAUDITED)

	<u>Number of Operators</u>	<u>Passenger Fare Revenue as a Percent of Total Operating Revenues and Subsidies</u>
<u>Larger Transit Operators</u>		
50 million passengers and over	2	34.8%
10 million to 50 million passengers	4	32.2
<u>Smaller Transit Operators</u>		
One million to 10 million passengers	15	21.2
100,000 to one million passengers	19	17.8
Fewer than 100,000 passengers	20	16.2

The major source of funding for the smaller operators statewide was the local TDA subsidy. In fiscal year 1987-88, local TDA subsidies accounted for 53.5 percent of the total operating revenues and subsidies received by the smaller operators. In contrast, for the larger operators statewide, local TDA subsidies accounted for only 27.8 percent of the total operating revenues and subsidies received in

fiscal year 1987-88. On average, in fiscal year 1987-88, each passenger carried by the smaller operators benefited from a higher local TDA subsidy than each passenger carried by the larger operators. Table I-8 illustrates the average local TDA subsidy per passenger by size of operator. Generally, the larger transit operators received a lower TDA subsidy per passenger.

TABLE I-8

**LOCAL TRANSPORTATION DEVELOPMENT ACT
AVERAGE SUBSIDY PER PASSENGER BY OPERATOR SIZE
FOR 60 CALIFORNIA PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88
(UNAUDITED)**

	<u>Number of Operators</u>	<u>Average Subsidy per Passenger</u>
<u>Larger Transit Operators</u>		
50 million passengers and over	2	\$0.33
10 million to 50 million passengers	4	0.53
<u>Smaller Transit Operators</u>		
One million to 10 million passengers	15	0.98
100,000 to one million passengers	19	1.34
Fewer than 100,000 passengers	20	2.15

The third major source of funds for the larger operators statewide was from the category "other local subsidies," which accounted for 24.6 percent of the larger operators' total operating revenues and subsidies in fiscal year 1987-88. Three of the four larger operators in our sample of eight operators received other local subsidies from an additional one-half cent tax surcharge approved by county voters. In contrast, other local subsidies accounted for only 7.5 percent of the total operating revenues and subsidies received by the smaller operators statewide. Only one of the four smaller operators in our sample of eight operators received subsidies from a county sales tax surcharge.

From fiscal year 1984-85 through fiscal year 1987-88, the total operating revenues and subsidies of the larger operators statewide increased at a slower rate than those of the smaller operators. Table I-3 shows the increases in operating revenues and subsidies from fiscal year 1984-85 through fiscal year 1987-88 by operator size. Moreover, for the same period, increases or decreases in the various components of operating revenues and subsidies received by transit operators varied according to whether the transit operator was larger or smaller.

On average, the passenger fare revenue for the larger operators statewide increased more than the passenger fare revenue for the smaller operators. Specifically, passenger fare revenue increased 33.9 percent for the larger operators while it increased only

19.6 percent for the smaller operators. Moreover, passenger fare revenue generally increased more for the four larger operators than it did for the four smaller operators in our sample of eight operators we reviewed in more depth. From fiscal year 1984-85 through fiscal year 1987-88, each of the four larger operators in our sample increased its base fare by \$0.15 to \$0.35. However, over the same time period, three of the four smaller operators increased their base fare by only \$0.05 to \$0.20 while one of the smaller operators did not increase its base fare at all.

Further, local TDA subsidies received by the larger operators statewide increased less than the local TDA subsidies received by the smaller operators statewide. From fiscal year 1984-85 through fiscal year 1987-88, local TDA subsidies increased 59.3 percent for the smaller operators while local TDA subsidies increased only 26.3 percent for the larger operators during the same period. In addition, other local subsidies decreased 3.3 percent for the larger operators while these subsidies increased 46.1 percent for the smaller operators. However, because we did not review the regulations governing the allocation of these funds or the allocation practices, we cannot explain the differences between changes in the amounts of these subsidies received by larger operators and changes in the amounts received by smaller operators.

Finally, state and federal subsidies decreased from fiscal year 1984-85 through fiscal year 1987-88 for both the larger operators and the smaller operators statewide. Specifically, state subsidies decreased 94.1 percent for larger operators and 89.4 percent for smaller operators. Moreover, state subsidies amounted to only \$1.9 million for all 60 operators in fiscal year 1987-88. In addition, federal subsidies decreased 10.0 percent for larger operators and 10.5 percent for smaller operators. Although state subsidies decreased significantly for both groups of operators, larger operators more frequently received state and federal funds. For example, four of the six larger operators received some state subsidies in fiscal year 1987-88 while only 17 of the 54 smaller operators received state funds. Further, four of the six larger operators received some federal funds in fiscal year 1987-88. In contrast, only 23 of the smaller operators received federal funds in that year.

II

TRENDS IN THE PERFORMANCE OF PUBLIC BUS OPERATORS¹

The Transportation Development Act (TDA) requires that all public transit operators use five performance indicators to measure the efficiency and effectiveness of their operations. These indicators are based upon five types of statistics: number of passengers, operating costs, vehicle revenue hours, vehicle revenue miles, and number of employees. Using the TDA statistics, we determined that, from fiscal year 1984-85 through fiscal year 1987-88, the number of passengers for public bus operators statewide decreased 11.6 percent while service, as measured by vehicle revenue miles, increased 0.5 percent.² Further, operating costs statewide increased 13.1 percent, slightly more than the 12.3 percent increase in the statewide consumer price index (CPI). For most of these statistics, we noticed a relationship to operator size. Specifically, from fiscal year 1984-85 through fiscal year 1987-88, for the larger transit operators, the number of passengers decreased 13.5 percent, vehicle revenue miles decreased 1.8 percent, and operating costs increased 11.5 percent. In contrast, for the smaller transit operators, the number of passengers increased 6.9 percent, vehicle revenue miles increased 8.9 percent, and operating

¹See the Appendix for definitions of technical terms used.

²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending upon the availability of data.

costs increased 24.7 percent. Also, using the TDA indicators, we determined that, from fiscal year 1984-85 through fiscal year 1987-88, operating costs per passenger statewide increased 30.2 percent, more than the 12.3 percent increase in the statewide CPI; however, operating costs per vehicle revenue hour increased 7.0 percent, which is less than the increase in the CPI. Moreover, passengers per vehicle revenue hour decreased 15.8 percent, passengers per vehicle revenue mile decreased 11.1 percent, and vehicle revenue hours per full-time equivalent (FTE) employee decreased 0.6 percent.

In addition, from fiscal year 1984-85 through fiscal year 1987-88, public bus operators statewide drove 5.1 percent more vehicle revenue hours even though they drove only 0.5 percent more vehicle revenue miles. Increased traffic congestion is a factor that appears to have influenced the difference in the rates of increase between vehicle revenue hours and vehicle revenue miles. Because increased traffic congestion may influence vehicle revenue hours as a measure of service, we also used vehicle revenue miles, which are also a measure of service and appear to be less influenced by traffic congestion. We then calculated and analyzed operating costs per vehicle revenue mile, vehicle revenue miles per FTE employee, and vehicle revenue miles per vehicle revenue hour (average speed), which are not TDA-related performance indicators. From fiscal year 1984-85 through fiscal year 1987-88, operating costs per vehicle revenue mile increased

11.3 percent, vehicle revenue miles per FTE employee decreased 5.0 percent, and vehicle revenue miles per vehicle revenue hour decreased 4.3 percent.

Finally, because neither the larger nor the smaller operators consistently followed the statewide trends in performance indicators over the four-year review period, we determined that trends were not related to operator size. However, in fiscal year 1987-88, we did note a relationship between operator size and most performance indicators. For example, the larger operators had lower operating costs per passenger and higher operating costs per vehicle revenue hour and vehicle revenue mile than smaller operators had.

BACKGROUND

Section 99246 of the Public Utilities Code requires transit operators that receive TDA funds to undergo a performance audit once every three years. One objective of these triennial performance audits is to evaluate an individual transit operator's efficiency and effectiveness using five performance indicators: operating costs per passenger, operating costs per vehicle revenue hour, passengers per vehicle revenue hour, passengers per vehicle revenue mile, and vehicle revenue hours per employee. Transit operators use the following five types of performance statistics to calculate the five TDA performance indicators: operating costs, passengers carried, vehicle revenue hours, vehicle revenue miles, and FTE employees. In this chapter, we

use these performance statistics and indicators to measure the overall performance of transit operators statewide.

In addition, because increased traffic congestion may influence vehicle revenue hours as a measure of service, we used vehicle revenue miles, which are also a measure of service and appear to be less influenced by traffic congestion. We then calculated and analyzed operating costs per vehicle revenue mile, vehicle revenue miles per FTE employee, and vehicle revenue miles per vehicle revenue hour. The effect of congestion on vehicle revenue hours is discussed later in this chapter.

The TDA defines operating costs to exclude several expense categories, including depreciation and amortization. Consequently, in our analyses, operating costs do not include depreciation and amortization. Passengers are an operator's total number of boarding passengers whether they produce revenues or not. Vehicle revenue hours are the total number of hours that an operator's buses are in revenue service, including driver rest periods. Likewise, vehicle revenue miles are the total number of miles that an operator's buses are in revenue service. A bus is in revenue service only when it is available to the public and there is a reasonable expectation of carrying passengers. Consequently, revenue service excludes hours and miles used while traveling to and from storage facilities. Finally, an FTE employee is equal to 2,000 hours of work in one year.

Performance statistics and indicators can be useful tools for improving transit operations. For example, the triennial performance audit reports that make use of these statistics and indicators are used by management to measure transit system efficiency and effectiveness and are a basis for initiating system improvements. Further, these reports are distributed to interested parties, including the operators' boards of directors, regional transportation planning agencies, and county transportation commissions. In addition to reporting the five types of performance statistics in the triennial audit reports, transit operators are required to report the statistics annually to the State Controller's Office if they receive TDA funds. In addition, if they receive Urban Mass Transportation Act funds, transit operators must report the statistics to the Urban Mass Transportation Administration (UMTA) in their annual Section 15 reports. We obtained statewide performance data from a combination of these sources. For the purpose of our review, we defined larger operators as those serving at least 10 million passengers and smaller operators as those serving fewer than 10 million passengers.

In this chapter, we discuss trends in the operational performance of public transit operators statewide rather than comparing operators with each other. Because transit operators in any specific area are affected by numerous variables such as geography, economy, and local laws, accurate comparisons of operators' performance, as measured by statistics and indicators, are difficult. Further, some indicators can be misleading if the operating environment is not clearly

understood. For example, an increase in vehicle revenue hours per FTE employee might indicate increased efficiency. However, if increased traffic congestion rather than increased service caused the increase in vehicle revenue hours, this statistic and related indicators could be misleading. Table II-1 shows the performance statistics and indicators for transit operators statewide for fiscal years 1984-85 and 1987-88. Volume II provides more detail on the performance indicators and the operating environments of each of the eight operators we reviewed in more depth.

TRENDS IN THE NUMBER OF PASSENGERS,
VEHICLE REVENUE MILES, AND OPERATING COSTS

For transit operators statewide from fiscal year 1984-85 through fiscal year 1987-88, the number of passengers decreased 11.6 percent while the level of service, as measured by vehicle revenue miles, increased 0.5 percent. Further, operating costs statewide increased 13.1 percent, slightly more than the 12.3 percent increase in the statewide CPI. The trends in most of these statistics were related to operator size. Specifically, for larger operators, from fiscal year 1984-85 through fiscal year 1987-88, the number of passengers decreased 13.5 percent, vehicle revenue miles decreased 1.8 percent, and operating costs increased 11.5 percent, slightly less than the 12.3 percent statewide CPI.

In contrast, for smaller operators, from fiscal year 1984-85 through fiscal year 1987-88, the number of passengers increased 6.9 percent, and vehicle revenue miles increased 8.9 percent. In addition, operating costs increased 24.7 percent, more than the 12.3 percent increase in the statewide CPI (although some of the operating cost increase is explained by the increase in service).

TABLE II-1
 PERFORMANCE STATISTICS AND INDICATORS
 FOR STATEWIDE PUBLIC BUS SERVICE
FISCAL YEARS 1984-85 AND 1987-88
(UNAUDITED)

	<u>Number of Operators^a</u>	<u>Fiscal Year 1984-85</u>	<u>Fiscal Year 1987-88</u>	<u>Percent Change</u>
<u>Performance Statistics:</u>				
Operating costs	60	\$758,706,760	\$858,435,222	13.1%
Vehicle revenue hours	93	18,777,535	19,726,990	5.1
Vehicle revenue miles	93	260,222,806	261,627,190	0.5
Passengers	97	940,931,781	832,175,229	(11.6)
Full-time equivalent (FTE) employees	79	22,141	23,346	5.4
<u>Performance Indicators: Transportation Development Act (TDA) Related</u>				
Operating costs per passenger	60	\$1.06	\$1.38	30.2
Operating costs per vehicle revenue hour	60	\$57.23	\$61.22	7.0
Passengers per vehicle revenue hour	93	50.1	42.2	(15.8)
Passengers per vehicle revenue mile	93	3.6	3.2	(11.1)
Vehicle revenue hours per FTE employee	78	838.4	833.5	(0.6)
<u>Performance Indicators: Non-TDA Related</u>				
Operating costs per vehicle revenue mile	60	\$4.17	\$4.64	11.3
Vehicle revenue miles per FTE employee	77	11,603.3	11,026.4	(5.0)
Vehicle revenue miles per vehicle revenue hour	92	13.9	13.3	(4.3)

Sources: Section 15 reports of the Urban Mass Transportation Administration, audited financial statements, annual reports of financial transactions of transit operators to the State Controller's Office for fiscal years 1984-85 and 1987-88, and auditors' calculations.

^a These are the number of transit operators for which we were able to isolate data related to public bus service only.

The four larger operators of the eight operators we reviewed in more depth generally followed the statewide trend in passengers for larger operators. The four larger operators attributed the decreases in passengers to a variety of conditions including fare increases, decreases in service and quality because of budget reductions, and more affordable private vehicle costs, such as lower gasoline prices. Similarly, the four smaller operators of the eight operators we reviewed in more depth generally followed the statewide trend in passengers for smaller operators. One of the four smaller operators cited expanded bus service as the reason for the increase in passengers.

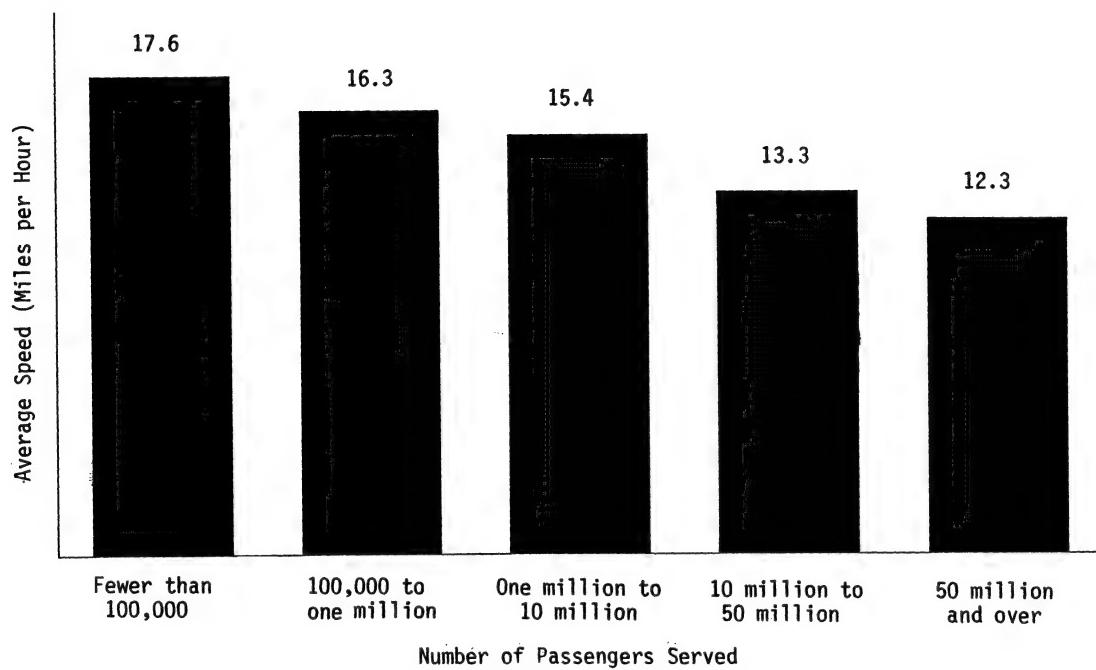
**TRENDS IN THE NUMBER OF
VEHICLE REVENUE HOURS
AND AVERAGE SPEED**

From fiscal year 1984-85 through fiscal year 1987-88, statewide transit operators' vehicle revenue hours increased 5.1 percent even though operators statewide drove only 0.5 percent more vehicle revenue miles. Moreover, from fiscal year 1984-85 through fiscal year 1987-88, larger operators' vehicle revenue hours increased 3.7 percent while vehicle revenue miles decreased 1.8 percent, and smaller operators' vehicle revenue hours increased 10.9 percent while vehicle revenue miles increased only 8.9 percent. As a result, the increase in vehicle revenue hours cannot be completely explained by an increase in the level of service, as measured by vehicle revenue miles.

Increased traffic congestion is a factor that appears to have influenced the trend in vehicle revenue hours. One measure of the effect of traffic congestion is the change in operators' vehicle revenue miles per vehicle revenue hour (average speed). Average speed for transit operators statewide decreased by 4.3 percent from fiscal year 1984-85 through fiscal year 1987-88. Because both larger and smaller operators had decreases in average speed, we determined that this trend for the four-year review period was not related to operator size. However, in fiscal year 1987-88, we did notice a relationship between operator size and average speed when we stratified the operators into five different sizes. During fiscal year 1987-88, operators serving fewer than 100,000 passengers drove an average speed of 17.6 vehicle revenue miles per vehicle revenue hour and operators serving at least 50 million passengers drove an average speed of 12.3 vehicle revenue miles per vehicle revenue hour. Chart II-1 shows the average speed driven by different sized operators in fiscal year 1987-88.

CHART II-1

**AVERAGE SPEED (VEHICLE REVENUE MILES
PER VEHICLE REVENUE HOUR) DRIVEN BY
CALIFORNIA PUBLIC BUS OPERATORS
BY SIZE OF OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



TRENDS IN PERFORMANCE INDICATORS

Trends in seven performance indicators for public bus operators statewide from fiscal year 1984-85 through fiscal year 1987-88 present a varied picture. Although operating costs per

passenger, operating costs per vehicle revenue hour, and operating costs per vehicle revenue mile all increased, only operating costs per passenger increased more than the increase in the statewide CPI. However, both passengers per vehicle revenue hour and passengers per vehicle revenue mile decreased. For indicators involving FTE employees, there was no clear trend among operators with some operators' performance decreasing and other operators' performance increasing. Although trends for most individual statistics from which the performance indicators were calculated were related to operator size, none of the trends in the performance indicators for the four-year review period were related to operator size.

In contrast, in fiscal year 1987-88, trends for most indicators were related to operator size. For example, larger operators had lower operating costs per passenger and higher operating costs per vehicle revenue hour and vehicle revenue mile than smaller operators. In addition, larger operators carried more passengers per vehicle revenue hour and vehicle revenue mile than smaller operators.

Operating Costs per Passenger

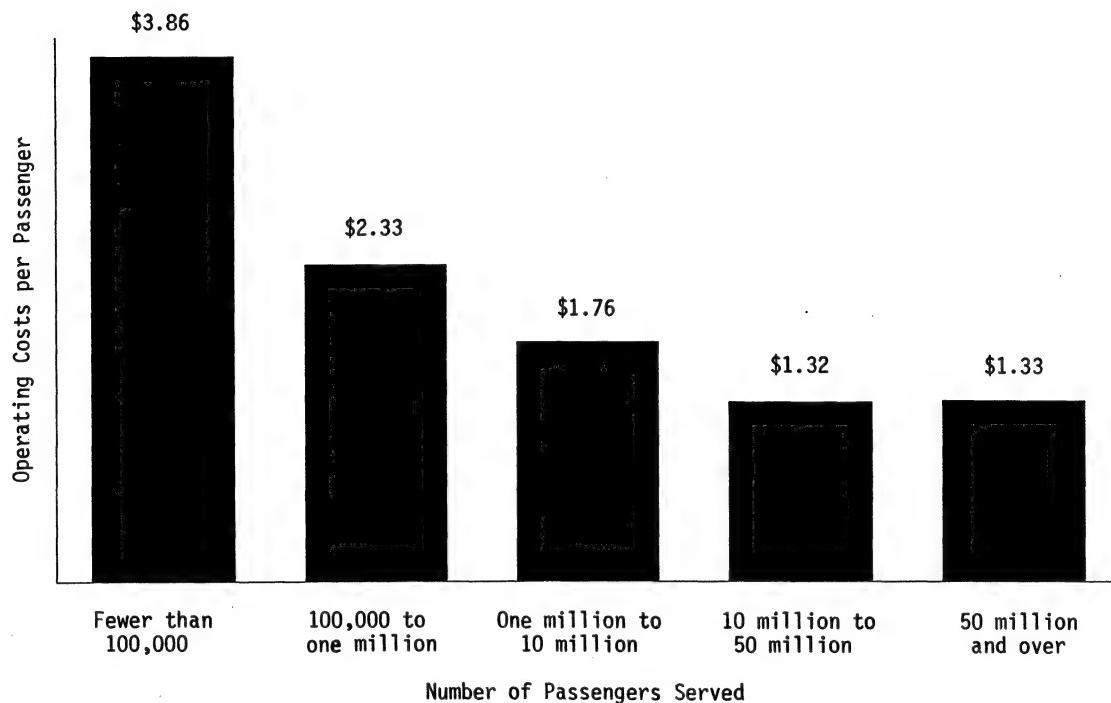
From fiscal year 1984-85 through fiscal year 1987-88, operating costs per passenger increased 30.2 percent (from \$1.06 to \$1.38) for transit operators statewide, more than the 12.3 percent increase in the statewide CPI. Forty-four (73.3 percent) of the 60 operators had increases in operating costs per passenger. This

increase in operating costs per passenger was the result of operating costs increasing and the number of passengers decreasing. This trend for the four-year review period is not related to operator size. Both larger and smaller operators had increases in operating costs per passenger that exceeded the statewide CPI.

However, in fiscal year 1987-88, we did notice a relationship between operator size and operating costs per passenger when we stratified the operators into five different sizes. Chart II-2 shows that smaller operators generally had higher operating costs per passenger than larger operators. For example, it cost transit operators serving fewer than 100,000 passengers an average of \$3.86 per passenger to provide bus service in fiscal year 1987-88 while it cost transit operators serving over 50 million passengers an average of only \$1.33 per passenger to provide bus service.

CHART II-2

**OPERATING COSTS PER PASSENGER
BY SIZE OF CALIFORNIA PUBLIC BUS OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



**Operating Costs per
Vehicle Revenue Hour**

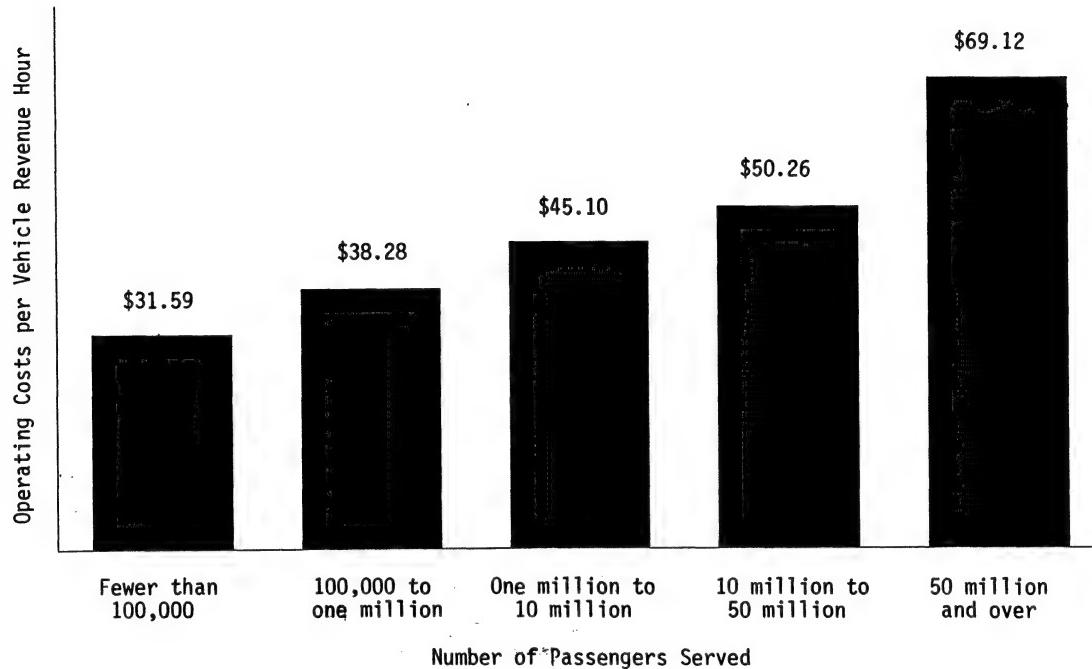
From fiscal year 1984-85 through fiscal year 1987-88, operating costs per vehicle revenue hour increased 7.0 percent (from \$57.23 to \$61.22) for transit operators statewide, less than the 12.3 percent increase in the statewide CPI. Fifty-one (85.0 percent)

of the 60 operators had increases in operating costs per vehicle revenue hour. This trend for the four-year review period is not related to operator size. Both larger and smaller operator groups had increases in operating costs per vehicle revenue hour that were less than the increases in the statewide CPI.

However, in fiscal year 1987-88, we did notice a relationship between operator size and operating costs per vehicle revenue hour when we stratified the operators into five different sizes. Chart II-3 shows that the larger the transit operator, the higher the operating costs per vehicle revenue hour. For example, it cost transit operators serving over 50 million passengers an average of \$69.12 per vehicle revenue hour in fiscal year 1987-88. However, it cost transit operators serving fewer than 100,000 passengers an average of \$31.59 per vehicle revenue hour during the same period.

CHART II-3

**OPERATING COSTS PER VEHICLE REVENUE HOUR
BY SIZE OF CALIFORNIA PUBLIC BUS OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



Although the TDA requires triennial audits to assess transit operators' efficiency using operating costs per vehicle revenue hour, reviewing changes in this performance indicator to measure how well operators are containing the costs of providing service can be misleading. If we only use the indicator of operating costs per vehicle revenue hour to evaluate an individual operator's performance,

it may appear as if the operator is doing a relatively good job of containing the costs of providing service. However, if we use this indicator in conjunction with the indicator of operating costs per vehicle revenue mile, the performance picture can change. For example, for one larger operator, operating costs per vehicle revenue hour increased only 3.8 percent from fiscal year 1984-85 through fiscal year 1987-88 compared with the 10.8 percent increase in the area CPI. However, operating costs per vehicle revenue mile for this operator increased 22.9 percent over the same period. The effect of increased traffic congestion, which we mentioned earlier in this chapter, contributed to the disparity in increases between these two indicators. Specifically, this operator's average speed decreased 15.0 percent from fiscal year 1984-85 through fiscal year 1987-88. This decrease in average speed contributed to an increase in vehicle revenue hours without a commensurate increase in service as measured by vehicle revenue miles. Because of this problem in using operating costs per vehicle revenue hour alone as an indicator of operator efficiency, we also calculated operating costs per vehicle revenue mile.

Operating Costs per Vehicle Revenue Mile

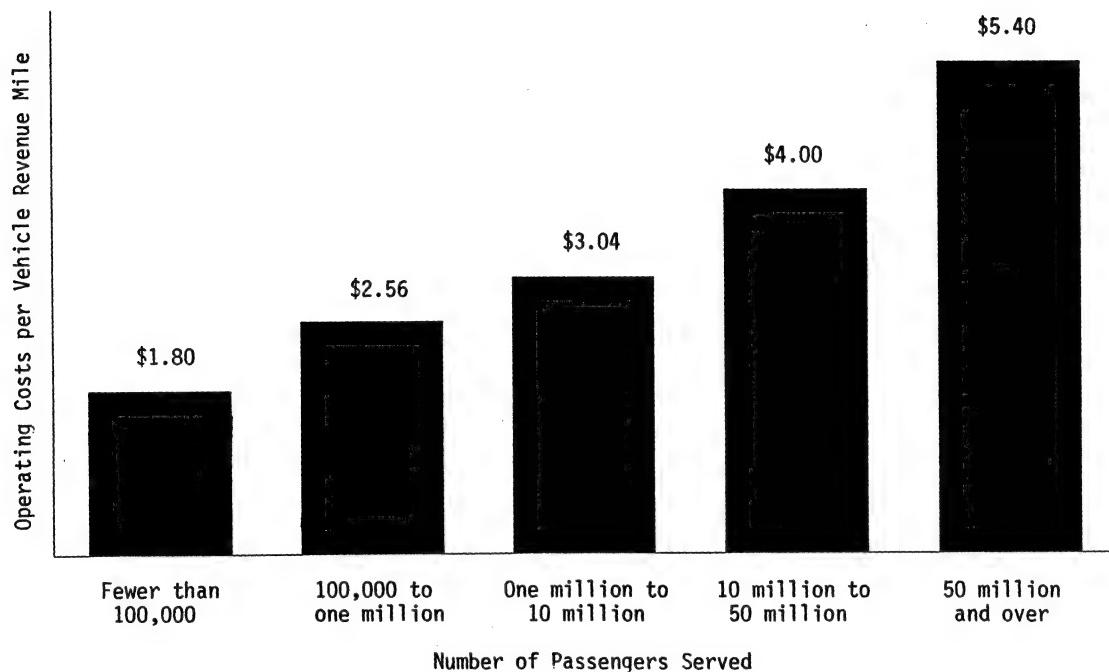
From fiscal year 1984-85 through fiscal year 1987-88, operating costs per vehicle revenue mile increased 11.3 percent (from \$4.17 to \$4.64) for transit operators statewide, less than the 12.3 percent increase in the statewide CPI. Fifty-two (86.7 percent)

of the 60 operators had increases in operating costs per vehicle revenue mile. (As with vehicle revenue hours, increases in vehicle revenue miles normally result in increases in wages and benefits. In addition, increases in vehicle revenue miles also cause increases in maintenance costs, as discussed in Chapter III of this report.) This trend for the four-year review period is not related to operator size. Both larger and smaller operator groups had increases in operating costs per vehicle revenue mile that were less than the increases in the statewide CPI.

However, in fiscal year 1987-88, we did notice a relationship between operator size and operating costs per vehicle revenue mile when we stratified the operators into five different sizes. Chart II-4 shows that operators that served fewer passengers had lower operating costs per vehicle revenue mile than those that served more passengers. For example, in fiscal year 1987-88, it cost operators that served fewer than 100,000 passengers only \$1.80 per vehicle revenue mile while it cost operators that served at least 50 million passengers \$5.40 per vehicle revenue mile.

CHART II-4

**OPERATING COSTS PER VEHICLE REVENUE MILE
BY SIZE OF CALIFORNIA PUBLIC BUS OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



Passengers per Vehicle Revenue Hour

From fiscal year 1984-85 through fiscal year 1987-88, passengers per vehicle revenue hour for statewide transit operators decreased 15.8 percent from 50.1 passengers per hour to 42.2 passengers per hour. Forty-eight (51.6 percent) of the 93 operators had decreases in passengers per vehicle revenue hour. This trend for the four-year

review period is not related to operator size. Both larger and smaller operators had decreases in passengers per vehicle revenue hour.

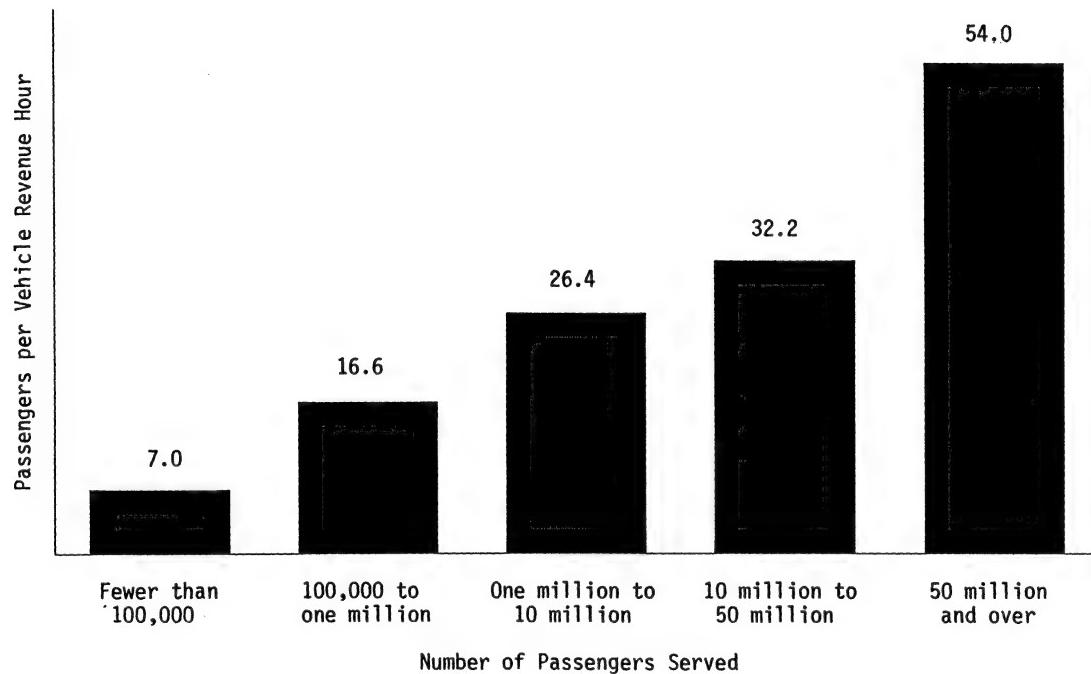
Passengers per vehicle revenue hour was intended to be a measure of transit operators' effectiveness in providing service. However, this indicator is also influenced by increasing traffic congestion. In addition, an increase in the indicator is not always preferred. For example, one larger transit operator did not view its decrease in passengers per vehicle revenue hour from 70.6 in fiscal year 1984-85 to 57.6 in fiscal year 1987-88 as unfavorable because the operator believes the decrease signifies an increase in its quality of service. According to this operator, it has made a specific commitment to reduce overcrowding on buses as a means to improve service quality. Overcrowding in buses reduces passengers' comfort and can result in reductions in an operator's total number of passengers. On the other hand, a low number of passengers per vehicle revenue hour can indicate that an operator has capacity for growth in the number of passengers it serves without having to increase the number of vehicle revenue hours.

In fiscal year 1987-88, we did notice a relationship between operator size and the number of passengers per vehicle revenue hour when we stratified the operators into five different sizes. For example, as Chart II-5 shows, transit operators that served fewer than 100,000 passengers in fiscal year 1987-88 served an average of

7.0 passengers per vehicle revenue hour while operators serving at least 50 million passengers served an average of 54.0 passengers per vehicle revenue hour.

CHART II-5

**PASSENGERS PER VEHICLE REVENUE HOUR
BY SIZE OF CALIFORNIA PUBLIC BUS OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



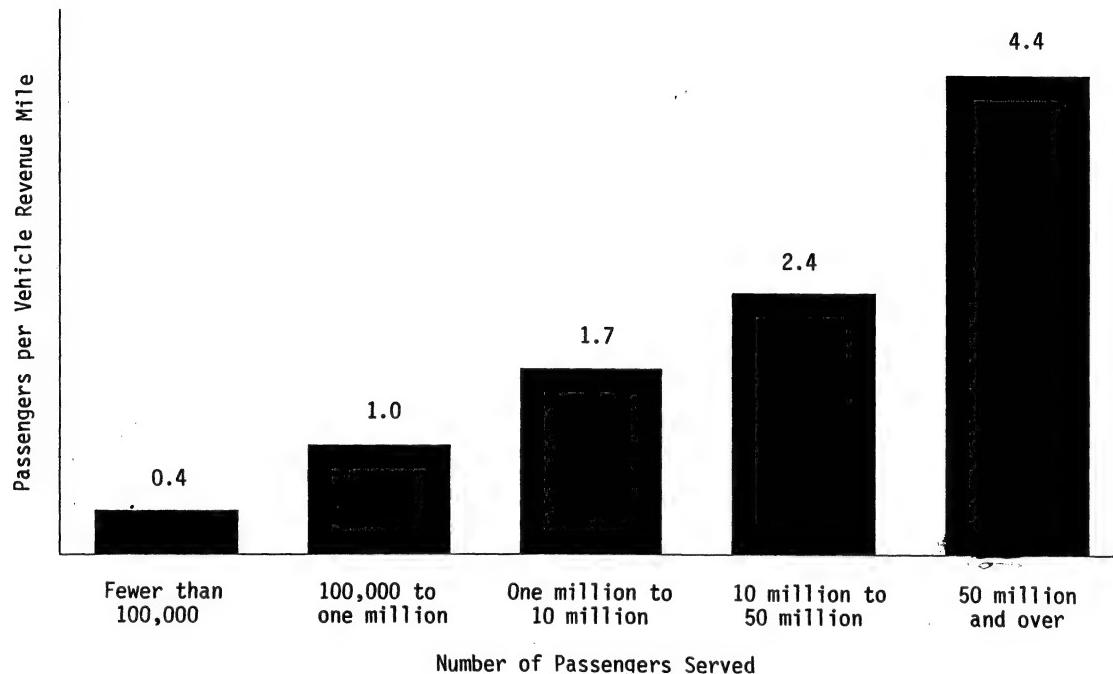
Passengers per Vehicle Revenue Mile

From fiscal year 1984-85 through fiscal year 1987-88, passengers per vehicle revenue mile for operators statewide decreased 11.1 percent from 3.6 passengers per vehicle revenue mile to 3.2 passengers per vehicle revenue mile. Forty-seven (50.5 percent) of the 93 operators had increases in passengers per vehicle revenue mile while 46 (49.5 percent) of the 93 operators had decreases in passengers per vehicle revenue mile. The statewide trend is not related to operator size. Both larger and smaller operators had decreases in passengers per vehicle revenue mile.

However, in fiscal year 1987-88, we did notice a relationship between operator size and the number of passengers per vehicle revenue mile when we stratified the operators into five different sizes. Chart II-6 shows that, in fiscal year 1987-88, transit operators serving at least 50 million passengers served 4.4 passengers per vehicle revenue mile while those operators serving fewer than 100,000 passengers served 0.4 passengers per vehicle revenue mile.

CHART II-6

**PASSENGERS PER VEHICLE REVENUE MILE
BY SIZE OF CALIFORNIA PUBLIC BUS OPERATOR
FISCAL YEAR 1987-88
(UNAUDITED)**



Vehicle Revenue Hours per FTE Employee

From fiscal year 1984-85 through fiscal year 1987-88, vehicle revenue hours per FTE employee decreased 0.6 percent for transit operators statewide from 838.4 vehicle revenue hours per FTE employee to 833.5 vehicle revenue hours per FTE employee. This decrease is due

to one larger operator's 7.6 percent decrease in vehicle revenue hours per FTE employee. Excluding this larger operator, vehicle revenue hours per FTE employee for operators statewide increased 6.2 percent. Forty-seven (60.3 percent) of the 78 operators had increases in vehicle revenue hours per FTE employee while 31 (39.7 percent) of the 78 operators had decreases in vehicle revenue hours per FTE employee. The statewide trend is not related to operator size. Both larger and smaller operators had increases and decreases in vehicle revenue hours per FTE employee.

Vehicle revenue hours per FTE employee is the last TDA-required performance indicator we analyzed. Theoretically, an increase in vehicle revenue hours per FTE employee would indicate that an operator is more efficiently using its personnel resources to provide transit services. However, as discussed previously, vehicle revenue hours as a measure of an operator's level of service can be distorted by traffic congestion. As a result, increases in this indicator may not represent improved productivity or efficiency. Because vehicle revenue hours as a measure of a transit operator's level of service can be inflated by traffic congestion, we also calculated vehicle revenue miles per FTE employee.

Vehicle Revenue Miles per FTE Employee

From fiscal year 1984-85 through fiscal year 1987-88, vehicle revenue miles per FTE employee for transit operators statewide decreased 5.0 percent from 11,603.3 vehicle revenue miles per FTE employee to 11,026.4 vehicle revenue miles per FTE employee. This decrease is mainly due to one larger operator's 10.8 percent decrease in vehicle revenue miles per FTE employee. Excluding this larger operator, vehicle revenue miles per FTE employee for operators statewide increased 0.9 percent. Forty (51.9 percent) of the 77 operators had increases in vehicle revenue miles per FTE employee while 37 (48.1 percent) of the 77 operators had decreases in vehicle revenue miles per FTE employee. The statewide trend was not related to operator size. Both larger and smaller operators had increases and decreases in vehicle revenue miles per FTE employee.

CONCLUSION

During this review of trends in the operational performance of public transit operators statewide, we noted that increased traffic congestion has affected the validity of vehicle revenue hours as a measure of level of service for some operators. Some operators reported increases in vehicle revenue hours despite a reduction in service as measured by vehicle revenue miles. In addition, vehicle revenue miles per vehicle revenue hour (average speed) for operators statewide

decreased 4.3 percent from fiscal year 1984-85 through fiscal year 1987-88, indicating that it is taking bus drivers longer to finish their routes.

RECOMMENDATION

To ensure that increased traffic congestion does not adversely affect the measurement and evaluation of transit performance, the Legislature should amend the California Public Utilities Code to add operating costs per vehicle revenue mile, vehicle revenue miles per FTE employee, and vehicle revenue miles per vehicle revenue hour (average speed) to the existing performance indicators.

III

VEHICLE MAINTENANCE COSTS INCREASED FOR SEVEN OF EIGHT PUBLIC BUS OPERATORS WHILE MOST OF THE OPERATORS' VEHICLE MAINTENANCE PROGRAMS APPEARED TO BE IMPROVING¹

From fiscal year 1984-85 through fiscal year 1987-88, the total costs of vehicle maintenance at seven of the eight transit operators we reviewed in more depth increased in excess of their respective areas' consumer price index (CPI). Meanwhile most operators reduced the size of their total fleets, and the average age of most operators' fleets increased. The increase in vehicle maintenance costs, coupled with the general reduction in fleet size, resulted in seven of the eight operators having increases in their vehicle maintenance costs per bus that exceeded the increase in the CPI for their respective areas. In addition, as a result of the greater increase in vehicle maintenance costs relative to smaller increases in the total number of miles driven, the vehicle maintenance costs per vehicle mile increased at three of the four of the larger operators and three of the four smaller operators we reviewed. For four of the eight operators, the increases in vehicle maintenance costs per vehicle mile exceeded the increase in the CPI for their respective areas. These increases in vehicle maintenance cost are partially explained by the fact that the operators generally drove an aging fleet of buses

¹See the Appendix for definitions of technical terms used.

increasingly more miles. Older buses with higher mileage often require more maintenance, such as the replacement of engines and transmissions. Moreover, some operators increased or enhanced their routine vehicle maintenance service and inspections, thus, increasing their costs. Finally, the mileage intervals between road calls due to mechanical failure increased for six of the eight operators, indicating that increased vehicle maintenance costs may have had a positive effect on operators' maintenance programs.

BACKGROUND

At the end of fiscal year 1987-88, the eight transit operators we reviewed in more depth operated a total of 4,219 buses, a decrease of 9.1 percent from a total of 4,641 buses in fiscal year 1984-85. The smallest of the transit operators operated 27 buses while the largest of the transit operators operated 2,581 buses. In maintaining buses, all operators, regardless of size, incurred vehicle maintenance costs, and for most operators, the largest portion of vehicle maintenance costs was spent on wages and benefits for vehicle maintenance employees. Operators also incurred costs for materials and supplies for both buses and the maintenance facilities used in maintaining the buses.

To determine whether operators had structured vehicle maintenance programs, we conducted in depth audit fieldwork at the maintenance facilities of the four larger operators and one smaller

operator. We determined that these operators had structured vehicle maintenance programs based on mileage intervals. All five of the transit operators performed various inspections on each bus, such as checking the safety of brakes. Also, these operators periodically performed certain maintenance tasks at scheduled intervals, such as changing engine and transmission oil and adjusting steering wheels. In addition to performing maintenance tasks at specified intervals, each of the five transit operators performed major maintenance as needed, such as replacing or rebuilding engines and transmissions.

Although the Transportation Development Act (TDA) provides measures for the evaluation of operational efficiency and effectiveness, it does not provide comparable measures for the evaluation of maintenance programs and activities of operators. To measure the efficiency and effectiveness of operators' maintenance programs and activities, we obtained and analyzed certain data that we considered were relevant. We used operators' vehicle maintenance costs, the size of operators' fleets, the total vehicle miles that operators drove buses, and the number of road calls due to mechanical failure while in service as indicators of the efficiency and effectiveness of operators' maintenance programs and activities. Where applicable, we used changes in the CPI as a benchmark in analyzing trends in the maintenance efficiency of the eight operators. We obtained data on the eight operators' maintenance programs from the annual reports of financial transactions of transit operators submitted by transit operators to the State Controller's Office and the

Section 15 reports submitted annually by operators to the Urban Mass Transportation Administration (UMTA). However, because vehicle maintenance statistics are not collected statewide, we do not present statewide trends for vehicle maintenance indicators in this report.

Moreover, because data for fiscal year 1983-84 were unavailable for one operator or, for another operator, not representative of the operator's performance because of labor strikes in that year, we limited the presentation of vehicle maintenance data in this chapter to the period from fiscal year 1984-85 through fiscal year 1987-88. However, in Volume 2, we present data on each operator for fiscal year 1983-84 through fiscal year 1987-88 when complete data were available.

VEHICLE MAINTENANCE COSTS INCREASED

Although vehicle maintenance costs increased at seven of the eight transit operators we reviewed, the increase was more pronounced at the smaller operators. From fiscal year 1984-85 through fiscal year 1987-88, three of the four larger operators had increases in vehicle maintenance costs of 18.3, 21.1, and 22.5 percent. Vehicle maintenance costs at one larger operator decreased 4.0 percent. During this same period, the four smaller operators had increases in vehicle maintenance costs of 13.1, 19.0, 28.6, and 29.4 percent. For seven of the eight operators, the increases in vehicle maintenance costs exceeded their respective areas' CPI.

While vehicle maintenance costs for seven of the eight operators increased, these increases were generally proportionate to increases in the operators' total operating costs. For each operator, from fiscal year 1984-85 through fiscal year 1987-88, vehicle maintenance costs as a percentage of total operating costs did not vary more than 3 percent. However, in fiscal year 1987-88, vehicle maintenance costs as a percentage of total operating costs varied considerably among operators. The four larger operators had vehicle maintenance costs as a percentage of operating costs of 16.1, 18.9, 27.1, and 22.2 percent while the four smaller operators had vehicle maintenance costs as a percentage of operating costs of 11.7, 18.0, 18.2, and 22.4 percent.

Wages and benefits for vehicle maintenance employees were the largest component of vehicle maintenance costs for six of the seven operators we reviewed that had complete wage and benefit data for fiscal year 1987-88. One operator did not provide wage and benefit data for fiscal year 1987-88. Moreover, for vehicle maintenance employees, wages and benefits as a percentage of total vehicle maintenance costs were, on average, slightly more for larger operators. For the four larger operators in fiscal year 1987-88, wages and benefits as a percentage of total vehicle maintenance costs were 54.7, 66.3, 73.2, and 84.9 percent. The larger operator that, for vehicle maintenance employees, had the lowest percentage of wages and benefits to total vehicle maintenance costs contracted with a private contractor for a portion of its transit service, including vehicle

maintenance. The operator recorded the costs associated with the contract as services without separately identifying wages and benefits included in the contract. However, for three of the four smaller operators during the same year, wages and benefits for vehicle maintenance employees as a percentage of total vehicle maintenance costs were 18.3, 53.9, and 89.0 percent. The fourth smaller operator did not provide this data. Two of the three smaller operators that, for vehicle maintenance employees, had the lowest percentages of wages and benefits to total vehicle maintenance costs contracted for a portion of their transit operations, including vehicle maintenance. These two smaller operators recorded as either purchased transportation or services the costs associated with the contracts without separately identifying wages and benefits included in the contract.

Moreover, from fiscal year 1984-85 through fiscal year 1987-88, the average increase in wages and benefits for vehicle maintenance employees was greater for the larger operators. This trend is contrary to the trend in total wages and benefits paid by transit operators statewide, as discussed in Chapter I, Volume 1 of this report. From fiscal year 1984-85 through fiscal year 1987-88, three larger operators had increases in wages and benefits for vehicle maintenance employees of 10.0, 21.7, and 26.2 percent. For the fourth larger operator, data were not available for fiscal year 1984-85. During this same period, the three smaller operators for which we had complete wages and benefits data had increases in wages and benefits for vehicle maintenance employees of 5.8, 6.0, and 20.7 percent.

Operators that had small increases or decreases in wages and benefits at any point during the period of our review had small increases or decreases in the number of vehicle maintenance employees.

The operators cited many reasons for the increases in wages and benefits for vehicle maintenance employees. Both larger and smaller transit operators cited increases resulting from union labor agreements. Two larger operators also cited increasing costs of such benefits as medical insurance and worker's compensation claims as major causes of the increases in wages and benefits. In addition, from fiscal year 1984-85 through fiscal year 1987-88, two of the three larger operators for which we had complete data on vehicle maintenance full-time equivalent (FTE) employees increased their number of vehicle maintenance FTE employees. One of the two operators increased its number of vehicle maintenance FTE employees by 8.4. From fiscal year 1985-86 through fiscal year 1987-88, another larger operator increased its number of vehicle maintenance FTE employees by 519. One of the two smaller operators for which we had complete data for vehicle maintenance FTE employees also increased its number of vehicle maintenance FTE employees by 2.6. Four operators cited either enhanced maintenance programs or new maintenance facilities as reasons for additional vehicle maintenance FTE employees. For example, one larger operator increased the number of vehicle maintenance FTE employees by 41 during fiscal year 1985-86. According to the operator, additional employees were needed to staff its new maintenance facility. However,

it decreased the number of vehicle maintenance FTE employees by 49 in fiscal year 1987-88 because of service reductions resulting from budget and ridership problems.

Furthermore, the cost of absenteeism contributed to increases in wage and benefit costs at two of the larger operators we reviewed. Absenteeism increases wages and benefits when vehicle maintenance employees do not work their scheduled shifts and operators must use more costly overtime to maintain service. A consultant for one operator estimated that unscheduled absences for vehicle maintenance employees cost the operator \$3 million annually.

The operators cited various reasons for the increases in vehicle maintenance costs other than wages and benefits increasing. Several of the operators stated vehicle maintenance costs increased because the operators improved their vehicle maintenance programs. For example, one operator stated that it implemented an aggressive maintenance program while another operator stated that its preventative maintenance schedules were increased by decreasing the mileage or time intervals for bus maintenance. Additionally, two operators opened new maintenance facilities or refurbished old facilities during the period of our review and cited the costs of additional vehicle maintenance equipment and supplies as other reasons for vehicle maintenance cost increases. Further, one operator stated that it enhanced its maintenance training program. Also, one larger operator indicated that newer buses have more equipment to maintain, such as wheelchair lifts,

air conditioners, and more complex electrical systems, which increase the cost of vehicle maintenance. Three operators also stated that the cost of replacement parts for buses have increased, especially if the bus manufacturer was foreign or used foreign components. Four operators also cited the increased cost of maintaining an aging fleet and increases in vehicle miles as contributing factors to increased vehicle maintenance costs. Older buses with higher mileage often require major maintenance, such as the replacement of engines and transmissions. Finally, one large operator cited increasing graffiti and vandalism to its buses as a significant maintenance cost.

THE SIZE OF TOTAL FLEETS AND
PEAK FLEETS GENERALLY DECREASED

While seven of the eight operators increased their vehicle maintenance costs, six of the eight operators reduced the size of their total fleets. As presented in Table III-1, all four larger operators and two of the four smaller operators reduced the number of buses in their total fleets. At the four larger operators, these decreases were 1.7, 3.9, 5.7, and 12.6 percent. For the two smaller operators, the decreases were 8.5 percent and 17.0 percent. The other two smaller operators had increases of 7.8 percent and 12.5 percent. Within their total fleets, three of the four larger operators reduced the size of their peak fleets while all four of the smaller operators increased the size of their peak fleets. The decreases at the three larger operators were 1.6, 5.2, and 9.2 percent while the increases at the four smaller

operators were 6.1, 12.0, 20.0, and 27.8 percent. One larger operator also increased the size of its peak fleet by 8.1 percent.

TABLE III-1
**CHANGES IN THE SIZE OF TOTAL FLEETS AND PEAK FLEETS
 FOR EIGHT PUBLIC TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88**

		Total Fleet		Peak Fleet	
		1984-85	1987-88	1984-85	1987-88
		Increase (Decrease) in Number of Buses		Percent Increase (Decrease) in Number of Buses	
<u>Larger Transit Operators</u>					
Southern California Rapid Transit District	2,952	2,581	(371)	(12.6)%	(105)%
Alameda-Contra Costa Transit District	864	849	(15)	(1.7)	638 (65)%
San Diego Transit Corporation	297	280	(17)	(5.7)	214 16 (9.2)
San Mateo County Transit District	311	299	(12)	(3.9)	245 241 8.1 (1.6)
<u>Smaller Transit Operators</u>					
Omnitrans, located in San Bernardino County	82	75	(7)	(8.5)	49 52 3 6.1
Stockton Metropolitan Transit District	64	69	5	7.8	40 48 8 20.0
Torrance Transit System	47	39	(8)	(17.0)	25 28 3 12.0
City of Vallejo	24	27	3	12.5	18 23 5 27.8

Operators cited various reasons for the reductions in the size of their total fleets. Several operators stated that they reduced the size of their fleets to comply with the UMTA regulations restricting the number of extra buses an operator can have beyond the number of buses required to provide maximum, or peak fleet, service. To reduce their fleets, operators disposed of older buses more quickly than they purchased new buses using UMTA grants. According to UMTA standards, buses must be more than 12 years old or have been driven more than 500,000 miles if they are to be replaced using UMTA funds.

Two smaller operators increased both their peak and total fleets from fiscal year 1984-85 through fiscal year 1987-88 because of increases in transit service. The other two smaller operators and one larger operator increased their peak fleets while reducing their total fleets, thus, using their existing total fleets more efficiently and effectively. Rather than purchasing additional buses, these three operators used existing underused buses in their total fleets to meet minor ridership growth and other changes in their service requirements.

VEHICLE MAINTENANCE COSTS PER BUS INCREASED

As a result of increases in vehicle maintenance costs for seven of the eight operators coupled with reductions in the size of total fleets for six of the eight operators, all operators had increases in their vehicle maintenance costs per bus from fiscal year 1984-85 through fiscal year 1987-88. Vehicle maintenance costs per bus are a measure of efficiency, measuring the cost of bus maintenance in relation to the size of an operator's fleet. For seven of the eight operators, the increases in vehicle maintenance costs per bus exceeded the increases in their respective areas' CPI.

From fiscal year 1984-85 through fiscal year 1987-88, the four larger operators had increases in their vehicle maintenance costs per bus of 9.9, 23.2, 25.5, and 27.4 percent. The larger operator with the smallest percentage increase, 9.9 percent, increased its vehicle maintenance costs per bus from \$38,894 in fiscal year 1984-85 to \$42,726 in fiscal year 1987-88. The larger operator with the largest percentage increase, 27.4 percent, increased its vehicle maintenance costs per bus from \$17,121 in fiscal year 1984-85 to \$21,810 in fiscal year 1987-88. The other two larger operators increased their vehicle maintenance costs per bus from \$18,882 and \$25,651 in fiscal year 1984-85 to \$23,265 and \$32,190, respectively, in fiscal year 1987-88.

For the same period, the four smaller operators had increases of 14.3, 20.0, 23.6, and 43.4 percent. The smaller operator with the smallest percentage increase, 14.3 percent, increased its vehicle maintenance costs per bus from \$12,076 in fiscal year 1984-85 to \$13,807 in fiscal year 1987-88. The smaller operator with the largest percentage increase, 43.4 percent, increased its vehicle maintenance costs per bus from \$18,864 in fiscal year 1984-85 to \$27,055 in fiscal year 1987-88. The other two smaller operators increased their vehicle maintenance costs per bus from \$8,075 and \$26,505 in fiscal year 1984-85 to \$9,693 and \$32,772, respectively, in fiscal year 1987-88.

VEHICLE MAINTENANCE COSTS PER
VEHICLE MILE GENERALLY INCREASED

Vehicle maintenance costs per vehicle mile are an indicator of efficiency. The indicator measures the cost of bus maintenance in relation to vehicle miles. At the five operators where we conducted maintenance fieldwork, we found that the operators' vehicle maintenance programs were generally based on mileage intervals. As vehicle miles increased, operators performed more frequent maintenance to prevent major mechanical failures, thus, increasing the cost of vehicle maintenance. Also, as vehicle miles increase, more bus parts are likely to wear out and need replacement, thus, increasing the costs of vehicle maintenance. Conversely, as vehicle miles decrease, the cost of vehicle maintenance should decrease.

While seven of the eight operators had increases in their vehicle maintenance costs and the increases were 13.1 percent or more, six of the operators had increases of 10.1 percent or less in the total number of vehicle miles that they drove their buses. However, smaller operators had, on average, greater increases in their total vehicle miles than did larger operators. Three of the four larger operators had increases in vehicle miles of 0.3, 0.9, and 10.1 percent. The fourth larger operator had a decrease in vehicle miles of 4.8 percent. According to the operator, vehicle miles decreased as a result of service reductions. However, during the same period, the four smaller operators had increases in vehicle miles of 0.1, 2.9, 9.0, and 33.4 percent. Operators stated that increases in their vehicle miles generally resulted from increased or expanded service.

Because six of the eight transit operators increased their vehicle maintenance costs by a greater percentage than they increased the total mileage they drove their buses, vehicle maintenance costs per vehicle mile increased at these six operators. One larger operator and one smaller operator decreased their vehicle maintenance costs per vehicle mile. Two of the four larger operators and two of the four smaller operators had increases in their vehicle maintenance costs per vehicle mile that exceeded the CPI for their areas.

From fiscal year 1984-85 through fiscal year 1987-88, three of the four larger operators had increases in their vehicle maintenance costs per vehicle mile of 7.1, 22.8, and 26.4 percent while one larger

operator reduced its vehicle maintenance costs per vehicle mile by 3.7 percent. The three larger operators increased their vehicle maintenance costs per vehicle mile from \$0.70, \$0.57, and \$0.53 in fiscal year 1984-85 to \$0.75, \$0.70, and \$0.67, respectively, in fiscal year 1987-88. The fourth larger operator decreased its vehicle maintenance costs per vehicle mile from \$1.08 in fiscal year 1984-85 to \$1.04 in fiscal year 1987-88.

From fiscal year 1984-85 through fiscal year 1987-88, three of the four smaller operators had increases in their vehicle maintenance costs per vehicle mile of 9.7, 13.0, and 26.7 percent while one smaller operator reduced its vehicle maintenance costs per vehicle mile by 2.4 percent. The three smaller operators increased their vehicle maintenance costs per vehicle mile from \$0.62, \$0.77, and \$0.30 in fiscal year 1984-85 to \$0.68, \$0.87, and \$0.38, respectively, in fiscal year 1987-88. The fourth smaller operator reduced its vehicle maintenance costs per vehicle mile from \$0.42 in fiscal year 1984-85 to \$0.41 in fiscal year 1987-88.

VEHICLE MILES PER BUS GENERALLY INCREASED

Because of the reductions in the size of the fleets and the increases in total vehicle miles, the number of vehicle miles driven per bus increased at three of the four larger operators and three of the four smaller operators. From fiscal year 1984-85 through fiscal year 1987-88, the increases in the number of vehicle miles per bus at

the three larger operators were 4.9, 14.8, and 16.8 percent. The fourth larger operator had a 3.2 percent decrease in vehicle miles per bus because the decrease in vehicle miles exceeded the reduction in the size of the operator's fleet. According to the operator, vehicle miles decreased because of service reductions resulting from budget and ridership problems. The three larger operators increased their vehicle miles per bus from 29,852, 35,847, and 36,868 in fiscal year 1984-85 to 31,321, 41,137, and 43,051, respectively, in fiscal year 1987-88. The fourth larger operator decreased its vehicle miles per bus from 35,787 in fiscal year 1984-85 to 34,657 in fiscal year 1987-88.

In addition, from fiscal year 1984-85 through fiscal year 1987-88, the increases in the number of vehicle miles per bus for three of the four smaller operators were 9.5, 18.5, and 31.4 percent while the fourth smaller operator had a decrease in vehicle miles per bus of 4.6 percent. The three smaller operators increased their vehicle miles per bus from 34,364, 28,557, and 30,377 in fiscal year 1984-85 to 37,612, 33,852, and 39,911, respectively, in fiscal year 1987-88. The fourth smaller operator decreased its vehicle miles per bus from 26,767 in fiscal year 1984-85 to 25,536 in fiscal year 1987-88.

AVERAGE AGE OF BUS FLEETS GENERALLY INCREASED

In addition to a decrease in the size of six of the eight operators' total fleets, the average ages of five of the eight operators' total fleets increased. The smaller operators' total fleets

were, on average, older than the larger operators' total fleets. Table III-2 displays the average age of the total fleets in fiscal years 1984-85 and 1987-88 for the eight operators we reviewed. In fiscal year 1984-85, the four larger operators' total fleets had average ages of 7, 7, 8, and 9 years while the four smaller operators' total fleets had average ages of 7, 9, 9, and 11 years. However, in fiscal year 1987-88, the average ages of the four larger operators' total fleets were 7, 8, 9, and 12 years, and the average ages of the four smaller operators' total fleets were 8, 10, 10, and 13 years. Because the average ages of most operators' total fleets increased, operators may have needed more vehicle maintenance. Two operators provided differing explanations for the increases in the average ages of their total fleets. One operator stated that it activated its older buses into peak service in addition to purchasing new buses. Another operator stated that its buses had not reached an age of 12 years and were, therefore, not eligible for federal funding for replacement according to UMTA standards.

TABLE III-2
 CHANGES IN THE AVERAGE AGES OF
 TOTAL FLEETS AND PEAK FLEETS
 FOR EIGHT PUBLIC TRANSIT OPERATORS
FISCAL YEARS 1984-85 AND 1987-88

Transit Operators	Total Fleet Average Age			Peak Fleet Average Age ^a		
	1984-85	1987-88	Percent Increase (Decrease) in Average Number of Years	1984-85	1987-88	Percent Increase (Decrease) in Average Number of Years
<u>Larger Transit Operators</u>						
Southern California Rapid Transit District	8	8	0	0.0%	4	7
Alameda-Contra Costa Transit District	7	9	2	28.6	5	6
San Diego Transit Corporation	9	12	3	33.3	6	9
San Mateo County Transit District	7	7	0	0.0	4	7
<u>Smaller Transit Operators</u>						
Omnitrans, located in San Bernardino County	7	10	3	42.9	5	8
Stockton Metropolitan Transit District	9	8	(1)	(11.1)	5	5
Torrance Transit System	9	10	1	11.1	3	5
City of Vallejo	11	13	2	18.2	8	10

^a The age of the peak fleet was computed using the newest buses.

In addition, Table III-2 displays the average age of the operators' peak fleets in fiscal years 1984-85 and 1987-88. In fiscal year 1984-85, the four larger operators' peak fleets had average ages of 4, 4, 5, and 6 years while the four smaller operators' peak fleets had average ages of 3, 5, 5, and 8 years. However, in fiscal year 1987-88, the average age of seven of the eight operators' peak fleets had increased. The four larger operators' peak fleets had average ages of 6, 7, 7, and 9 years, while the four smaller operators' peak fleets had average ages of 5, 5, 8, and 10 years.

THE EFFECTIVENESS OF OPERATORS' MAINTENANCE
PROGRAMS MAY HAVE IMPROVED AS MEASURED
BY AN INCREASE IN THE NUMBER OF VEHICLE MILES
BETWEEN ROAD CALLS DUE TO MECHANICAL FAILURE

Vehicle miles between road calls due to mechanical failure were a common measure of effectiveness for the five operators whose maintenance programs we reviewed in more depth. Increases in the total vehicle miles that public transit operators drive their buses between road calls may indicate that operators are becoming more effective in maintaining their fleets of buses. Conversely, decreases in the total number of vehicle miles that operators drive their buses between road calls may indicate that operators are becoming less effective in maintaining their fleets of buses.

It should be noted that, when recording this statistic, operators varied significantly in their definitions of road calls due to mechanical failure. Nevertheless, even with these definitional

differences, six of the eight operators appeared to have improved the effectiveness of their maintenance programs in that they increased the number of vehicle miles between road calls due to mechanical failure.

From fiscal year 1984-85 through fiscal year 1987-88, vehicle miles between road calls due to mechanical failure increased at six of the eight operators despite the increases in the average age of most operators' total fleets. At two of the four larger operators, the vehicle miles between road calls due to mechanical failure increased by 19.5 percent and 38.4 percent. These two operators increased their vehicle miles between road calls due to mechanical failure from 3,794 and 2,910 in fiscal year 1984-85 to 4,533 and 4,027, respectively, in fiscal year 1987-88. There were decreases of 2.5 percent and 17.8 percent in the intervals at the other two larger operators. These two operators decreased their vehicle miles between road calls due to mechanical failure from 3,894 and 2,203 in fiscal year 1984-85 to 3,795 and 1,811, respectively, in fiscal year 1987-88. At the four smaller operators, the vehicle miles between road calls due to mechanical failure increased 18.3, 22.5, 59.0, and 263.5 percent. The four smaller operators increased their vehicle miles between road calls due to mechanical failure from 24,084, 8,876, 2,254, and 2,069 miles in fiscal year 1984-85 to 28,494, 10,876, 3,584, and 7,520 miles, respectively, in fiscal year 1987-88.

The one smaller operator whose vehicle miles between road calls due to mechanical failure increased 263.5 percent cited two reasons for the increase in this measure of effectiveness. First, the operator replaced fareboxes that required service interruptions when jammed with fareboxes that could be repaired without causing a service interruption. In addition, the operator opened a new, larger maintenance facility with more adequate staffing.

During the period of our review, five of the eight transit operators added new buses to their existing fleets through capital expenditures. Adding new buses to fleets may improve operators' statistics on road calls due to mechanical failure without the operators improving the effectiveness of their maintenance programs. Operators with newer buses should have fewer major mechanical problems and major engine and transmission rebuilds or replacements, resulting in an increase in vehicle miles between road calls due to mechanical failure and, thus, a decrease in maintenance costs.

One larger operator with a decrease in vehicle miles between road calls due to mechanical failure cited the following reasons for the decline in this measure of effectiveness: older buses, brake problems with one particular type of bus, problems with a tire contractor failing to maintain the fleet's tires properly, and major engine failures on one type of bus. The other larger operator with a

decrease cited the increasing mechanical complexity of buses and inadequately trained maintenance employees as reasons for the decline in this measure.

FUTURE TRENDS IN OPERATORS'
VEHICLE MAINTENANCE COSTS

As previously discussed, we conducted in-depth audit fieldwork at five operators' maintenance facilities. All five operators had structured vehicle maintenance programs that included performing periodic maintenance on their buses. The increased vehicle maintenance costs cited in this report may have had a positive effect because the maintenance programs generally appeared to be improving based on the increase in the number of vehicle miles buses traveled between road calls due to mechanical failure. As we also noted, most operators' total fleets were getting older. Many buses and, in two cases, entire fleets had reached an average age of 12 years or older. Because of this aging trend, several operators were purchasing large numbers of new buses to replace older buses. The UMTA provides assistance in financing bus acquisitions.

Operators continue to replace older buses in this manner. However, under United States Environmental Protection Agency (EPA) regulations, new transit buses must meet more stringent emission standards by 1991. The American Public Transit Association (APTA) is concerned that existing emission control technology for diesel buses may not be able to meet the 1991 standards, and engine manufacturers

may have to meet these standards through the use of fuels such as methanol or compressed natural gas until improved emission control technology for diesel-fueled engines is available. Officials of the APTA believe this technology may be available by 1994. As a result, transit operators may expect a three-year period of uncertainty over the reliability and durability of engines in new transit buses, as well as substantial increases in both operating and capital costs in purchasing and maintaining these new buses. Transit operators will have to revise aspects of their vehicle maintenance programs to adapt to any changes in the mechanical or electrical components of new or retrofitted buses. For example, operators will have to add to their inventories the parts necessary to maintain the new buses. Further, operators will have to provide training to vehicle maintenance employees on how to maintain new or retrofitted buses. In addition, APTA believes that operators may delay in purchasing buses between 1991 and 1994 while awaiting improved technology for diesel-fueled engines. As a result, operators may use older buses for a longer period of time. Finally, fuels such as methanol and compressed natural gas are more flammable than diesel, raising concerns among transit operators about employee and passenger safety and associated costs.

IV

THREE OF FOUR PUBLIC BUS OPERATORS DID NOT ALWAYS FOLLOW A COMPETITIVE PROCUREMENT PROCESS¹

In our review of the competitive procurement practices of four transit operators, we determined that three transit operators did not always provide for competitive procurement of materials, supplies, and services. Out of a total of \$38,823,888 in procurements that we reviewed for four transit operators, we determined that, during fiscal year 1987-88, three operators spent \$2,022,778 for procurements without obtaining competitive bids or price quotes. However, the intent of federal and state requirements for transit operators is to provide for a competitive procurement process. The Urban Mass Transportation Administration's (UMTA) Circular 4220.1A requires that all procurement transactions of transit operators that receive federal operating subsidies be conducted in a manner that provides for maximum open and free competition.² When transit operators do not obtain competitive bids or price quotes, they may not always purchase materials, supplies, and services at the lowest possible cost and they do not afford all vendors an opportunity to obtain the operators' business. Further,

¹See the Appendix for definitions of technical terms used.

²UMTA Circular 4420.1A was superseded by UMTA Circular 4220.1B on May 5, 1988. However, the requirements for providing for maximum open and free competition remain unchanged in Circular 4220.1B.

transit operators that fail to follow federal procurement requirements jeopardize their eligibility for federal subsidies.

BACKGROUND

Transit operators procure a variety of materials, supplies, and services. Materials and supplies include such items as engine parts, radios, and printing inks; services can vary from bus towing to janitorial services.

We reviewed competitive procurement practices at four transit operators. These four operators were the Southern California Rapid Transit District (SCRTD), the Alameda-Contra Costa Transit District (AC Transit), the San Mateo County Transit District (SamTrans), and the San Diego Transit Corporation (SDTC). The cost of materials, supplies, and services procured by each of these transit operators is substantial. For bus services alone, during fiscal year 1987-88, the SCRTD spent \$79.5 million for materials, supplies, and services; AC Transit spent \$18.2 million; SamTrans spent \$11.9 million; and the SDTC spent \$6.7 million. In addition to purchasing materials, supplies, and services, operators have expenditures related to capital projects such as the construction of facilities and the acquisition of equipment such as buses. The procurement of these items is subject to federal or state requirements.

Federal requirements apply to each of the four transit operators in our review. These requirements pertain to the procurement of materials, supplies, and services and are applicable to all transit operators that receive federal operating subsidies from the UMTA. These requirements are outlined in UMTA Circular 4220.1A. Item 16(a) of UMTA Circular 4220.1A states that all procurement transactions must be conducted in a manner that provides for maximum open and free competition.

In addition to federal requirements, there are specific state laws that apply to each of the four transit operators in our review. The intent of both federal and state requirements is to provide for competition in the procurement process of transit operators. Unlike state requirements, which have specific dollar thresholds for competitive procurement, federal requirements apply to all purchases made by the transit operators regardless of the cost.

At each of the four transit operators, we obtained a list of vendors that had each been paid at least \$25,000 by the transit operator for procurements and identified the total amount of payments to the vendors during fiscal year 1987-88. We reviewed this list and eliminated procurements of such items as utilities and legal services that may not lend themselves to a competitive procurement process because the vendor appeared to be the sole supplier of those goods or the service appeared specialized in nature. Of the remaining procurements, we reviewed a number of those that appeared most likely

to lend themselves to the competitive procurement process to determine whether this process was followed. Because we did not randomly sample all procurements made by each operator, the extent to which an operator used a competitive procurement process for all procurements cannot be statistically projected.

For each of the procurements we examined, we reviewed the transit operator's records to determine the process the operator used to select a vendor. We determined whether the transit operator had sought bids or obtained at least one other price quote. If the transit operator had not sought competitive bids or obtained at least one other price quote, we requested the operator to provide us justification for not adhering to a competitive procurement process. We determined certain reasons, such as items being available only from a single source or emergency situations, to be acceptable justification. However, we did not consider reasons such as the transit operator's convenience to be adequate justification. For two of the four operators, we developed illustrations of some of the effects of not adhering to a competitive procurement process.

OPERATORS DID NOT ALWAYS FOLLOW A COMPETITIVE PROCUREMENT PROCESS

Three of the four operators did not always follow a competitive procurement process. Out of a total of \$38,823,888 in procurements that we reviewed for the four transit operators, we

determined that, during fiscal year 1987-88, three operators spent \$2,022,778 for procurements without obtaining competitive bids or price quotes.

SCRTD

We reviewed a total of 22 procurements at the SCRTD. These 22 procurements had a total cost of \$16,827,839. Of these 22 procurements, there were 17 procurements with a total cost of \$16,384,469 for which the SCRTD either sought competitive bids or obtained price quotes from other vendors or had acceptable justification for not adhering to a competitive procurement process. However, there were 5 procurements we reviewed for which the SCRTD could not provide us with any evidence of competitive bids or price quotes. Further, for these 5 procurements, the SCRTD could not provide us with acceptable justification for not adhering to a competitive procurement process. These 5 procurements represent materials, supplies, and services that had a total cost of \$443,370.

In one instance, during fiscal year 1987-88, the SCRTD obtained printing and graphics supplies from one vendor at a total cost of \$57,347 without contacting other vendors to at least obtain competitive price quotes. In another instance, during fiscal year 1987-88, the SCRTD purchased lumber, moulding, and a variety of miscellaneous materials from a vendor at a total cost of \$69,479 without at least contacting other vendors that sold these supplies and

materials. The director of the Office of Contracting, Procurement and Materiel, stated that as of March 1, 1989, the SCRTD had adopted additional policies to ensure that similar instances do not occur. In addition, he stated that, if competitive procurement is not feasible, the SCRTD will document the reason why purchases cannot be competitively bid.

AC Transit

We reviewed a total of 40 procurements at AC Transit. These 40 procurements had a total cost of \$11,116,917. Of these 40 procurements, there were 30 procurements with a total cost of \$10,455,781 for which AC Transit either sought competitive bids or obtained price quotes from other vendors or had acceptable justification for not adhering to a competitive procurement process. However, there were 10 procurements we reviewed for which AC Transit could not provide us with any evidence of competitive bids or price quotes. Further, for these 10 procurements, AC Transit could not provide us with acceptable justification for not adhering to a competitive procurement process. These 10 procurements represent materials, supplies, and services that had a total cost of \$661,136.

In one instance, during fiscal year 1987-88, AC Transit paid a total of \$57,103 to a vendor for the printing of bus passes. In another instance, AC Transit paid a vendor \$205,165 for janitorial services at facilities under construction. In neither of these cases

could the operator provide us with evidence that it sought competitive bids or obtained price quotes from other vendors that offered the same service.

SamTrans

We reviewed a total of 49 procurements at SamTrans. These 49 procurements had a total cost of \$8,126,102. Of these 49 procurements, there were 37 procurements with a total cost of \$7,207,830 for which SamTrans either sought competitive bids or obtained price quotes from other vendors or had acceptable justification for not adhering to a competitive procurement process. However, there were 12 procurements we reviewed for which SamTrans could not provide us with any evidence of competitive bids or price quotes. Further, for these 12 procurements, SamTrans could not provide us with acceptable justification for not adhering to a competitive procurement process. These 12 procurements represent materials, supplies, and services that had a total cost of \$918,272.

In one case, during fiscal year 1987-88, SamTrans retained a vendor to paint SamTrans' buses and to do some repair work at a total cost of \$149,213. In another case, SamTrans retained a vendor to repair bus shelters. SamTrans paid this contractor \$50,322 in fiscal year 1987-88 for the repairs. In neither of these cases could the operator provide us with evidence that it sought competitive bids or obtained price quotes from other vendors that offered the same service.

Following the period of our review, SamTrans' management stated that it had issued a memorandum to its staff directing adherence to its competitive procurement process.

SDTC

We reviewed a total of 26 procurements at the SDTC. These 26 procurements had a total cost of \$2,753,030. For all of these 26 procurements, the SDTC either sought competitive bids or obtained price quotes from other vendors or had acceptable justification for not adhering to a competitive procurement process.

REASONS OFFERED BY OPERATORS
FOR NOT ALWAYS FOLLOWING
A COMPETITIVE PROCUREMENT PROCESS

The three transit operators claimed various reasons for not always following a competitive procurement process. Two operators cited convenience as a reason for engaging vendors without obtaining competitive bids or price quotes. In another instance, an operator claimed it engaged a particular vendor without obtaining competitive bids or price quotes because the operator was satisfied with previous work the vendor had performed. However, the intent of federal and state requirements is to provide for competition. Further, UMTA Circular 4220.1A specifically requires that operators provide for

maximum open and free competition. These requirements apply regardless of the inconvenience caused to the operator and regardless of the vendor's previous work history.

In another instance, a transit operator stated that it engaged the services of a vendor without obtaining price quotes because of the vendor's willingness to do work on short notice. However, even if a transit operator has to obtain goods or services on short notice, it should adhere to a competitive procurement process unless there is acceptable justification. According to another operator, it believed that it could follow the Federal Acquisition Regulation rather than UMTA's competitive procurement requirements. The Federal Acquisition Regulation is the primary regulation used by federal executive agencies in their procurement of supplies and services. However, according to the deputy regional manager for UMTA Region IX, transit operators are required to comply with Circular 4220.1A.

EFFECTS OF NOT FOLLOWING A COMPETITIVE PROCUREMENT PROCESS

When transit operators do not follow a competitive procurement process, three possible negative effects can result. First, the operators may not have obtained the lowest possible cost for a purchase. For example, one vendor charged an operator approximately \$45.00 per hour for body repair and paint work on buses during fiscal year 1987-88. The operator did not obtain competitive bids or price quotes from other vendors for this procurement. We identified another

qualified vendor in the same area that charged a lower labor rate for the same kind of work. This vendor has repaired and painted buses for other transit operators. The vendor that we identified stated that it would have been interested in bidding for the transit operator's business.

Second, all vendors may not be afforded the opportunity to obtain the transit operator's business. For example, in fiscal year 1987-88, one operator paid a contractor \$27,308 for asphalt repair and concrete work at its facilities without going through a competitive procurement process. We determined, through the telephone directory, that there were 42 other vendors in the operator's area that offered paving and concrete services in fiscal year 1987-88.

Third, when transit operators do not follow procurement requirements as outlined in UMTA Circular 4220.1A and subsequently revised in UMTA Circular 4220.1B, the federal government may restrict their operating subsidies. According to the deputy regional manager for UMTA Region IX, when operators fail to follow correct procurement procedures, they jeopardize their eligibility for federal subsidies.

CONCLUSION

Three of the four operators we reviewed did not always provide for competitive procurement of materials, supplies, and services. Out of a total of \$38,823,888 in procurements that

we reviewed for the four operators, we determined that, during fiscal year 1987-88, three of the operators did not obtain competitive bids or price quotes for \$2,022,778 in purchases. When transit operators do not obtain competitive bids or price quotes, they may not always purchase materials, supplies, and services at the lowest possible cost and they do not afford all vendors an opportunity to obtain the operators' business. Further, transit operators that fail to follow federal procurement policies jeopardize their eligibility for federal operating subsidies.

RECOMMENDATION

The Southern California Rapid Transit District, Alameda-Contra Costa Transit District, and San Mateo County Transit District should adhere to all applicable state and federal competitive procurement requirements to consistently obtain materials, supplies, and services economically and to afford more vendors the opportunity to obtain the transit operators' business.

V

**INFORMATION ON PRIVATE SECTOR PARTICIPATION
IN THE PROVISION OF PUBLIC BUS SERVICE¹**

The federal government encourages transit operators receiving Urban Mass Transportation Administration (UMTA) funds to contract with private contractors to operate public bus service. Of the eight public transit operators that we reviewed in more depth, two contracted with private contractors to provide bus service in fiscal year 1987-88. In addition, in the same year, the six operators that provided demand-response service contracted with private contractors to provide most of this service. (For all eight operators, bus service was 99.2 percent of both types of service.) Finally, in reviewing the UMTA's most recent evaluations of four of the eight operators, we found that the operators complied with the private sector participation requirements cited in UMTA Circular 7005.1 even though the operators had contracted with private contractors for very little of the total cost of providing transit service. (Contracted service accounted for 1.7 percent of the eight operators' total costs of providing the two types of transit service in fiscal year 1987-88.)

BACKGROUND

Until the 1960s, private companies provided most of the United States' public transit service. However, many of these companies

¹See the Appendix for definitions of technical terms used.

failed to operate at a profit and began to abandon many service routes. In addition, state and local governments were concerned that public transit service provided by private contractors was unresponsive to the public's needs. Thus, beginning in the 1960s, many local municipalities began to take over the debt-ridden, private companies and developed today's public transit structure.

In the 1980s, the federal government began to encourage "privatization" of public transit, believing that private companies could provide public transit more economically and efficiently. Under privatization, cities, counties, and other public transit operators were encouraged to contract with private transit contractors to operate public transit routes. In 1986, the federal government encouraged public transit operators receiving grants from the UMTA to contract with private contractors for the provision of public transit service. UMTA Circular 7005.1 requires transit operators receiving UMTA funds to establish and follow a process for considering private participation in the provision of public transit.

Moreover, in 1982, the State enacted legislation that specified that a public transit operator could not receive state transit assistance funds if the operator entered into labor contracts that precluded the operator from contracting with private contractors. However, state transit assistance funds no longer play a large role in subsidizing public transit.

We reviewed records of eight public transit operators to determine the extent to which they contracted with private contractors to provide bus service and demand-response service. Transit operators provide bus service according to regular schedules over prescribed routes while they provide demand-response service in response to requests from the public for transportation that is not available on regularly scheduled routes. For the eight operators, bus service was 99.2 percent of both types of service. Because we did not randomly select the eight operators we reviewed, the extent to which they contracted with private companies may not be representative of all public transit operators in the State.² Furthermore, the amount of private contracting done by individual operators may not be representative of all contracting done within their service areas. In addition, we reviewed the UMTA's most recent evaluations of four of the eight public operators to determine whether, according to the UMTA, the operators complied with the UMTA's requirements for privatization.

PRIVATE SECTOR PARTICIPATION FOR BUS SERVICE AT EIGHT PUBLIC TRANSIT OPERATORS

Although all eight operators we reviewed provided bus service, two of the eight operators contracted with private contractors to provide all or a portion of this service. The two operators contracted

²Chapter I shows that larger operators statewide did not contract out for bus service as frequently as smaller operators did.

with private contractors to provide approximately 245,000 vehicle revenue hours (37.2 percent) of the approximately 658,000 vehicle revenue hours of bus service in their areas during fiscal year 1987-88. The \$7,135,742 it cost the two private contractors to provide 37.2 percent of the service accounted for 19.5 percent of the \$36,616,000 it cost to provide all bus service in the two operators' areas during the year. However, this contracted service represented only 2.2 percent of the vehicle revenue hours and 1.0 percent of the cost of bus service provided by all eight operators in fiscal year 1987-88. Table V-1 shows the extent to which the eight public operators contracted with private contractors to provide bus service.

TABLE V-1

**LEVEL OF PRIVATE SECTOR PARTICIPATION
IN PROVIDING BUS SERVICE
FOR EIGHT PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88
(UNAUDITED)**

<u>Transit Operators</u>	Total Vehicle Revenue Hours	Vehicle Revenue Hours Contracted	Percent Contracted	Total Operating Costs	Operating Costs Contracted	Percent Contracted
Southern California Rapid Transit District	7,236,436	0	0.0%	\$508,342,000	\$ 0	0.0%
Alameda-Contra Costa Transit District	1,887,346	0	0.0	122,310,000	0	0.0
San Diego Transit Corporation	816,927	0	0.0	40,615,000	0	0.0
San Mateo County Transit District	599,748	186,081	31.0	34,544,000	5,329,742	15.4
Omnitrans, located in San Bernardino County	179,441	0	0.0	8,985,000	0	0.0
Stockton Metropolitan Transit District	126,503	0	0.0	5,719,000	0	0.0
Torrance Transit System	112,783	0	0.0	5,789,000	0	0.0
City of Vallejo	<u>58,636</u>	<u>58,636</u>	100.0	<u>2,072,000</u>	<u>1,806,000</u>	87.2
Total	<u>11,017,820</u>	<u>244,717</u>	2.2	<u>\$728,376,000</u>	<u>\$7,135,742</u>	1.0

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

In contrast, six of the eight public operators we reviewed provided demand-response service, and all six contracted with private contractors to provide this service in fiscal year 1987-88. In fact, five of the six contracted with private contractors to provide all of this type of service in their areas. The contracted service represented at least 93.0 percent of the vehicle revenue hours and an estimated 88.0 percent of the cost of providing demand-response service in the six operators' areas. Table V-2 shows the extent to which the six public operators contracted with private contractors to provide demand-response service.

TABLE V-2

LEVEL OF PRIVATE SECTOR PARTICIPATION
IN PROVIDING DEMAND-RESPONSE SERVICE
FOR SIX PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88
(UNAUDITED)

<u>Transit Operators</u>	Total Demand-Response Vehicle Revenue Hours Contracted	Demand-Response Vehicle Revenue Hours Contracted	Total Demand-Response Operating Costs	Demand-Response Operating Costs Contracted
San Diego Transit Corporation	23,906	23,906	\$ 407,290	\$ 407,290
San Mateo County Transit District	30,308	30,308	100.0	100.0
Omnitrans, located in San Bernardino County	129,466	129,466	100.0	100.0
Stockton Metropolitan Transit District	14,565	Unknown	Unknown	607,335
Torrance Transit System ^b	8,606	8,606	100.0	345,157
City of Vallejo ^c	Unknown	Unknown	100.0	<u>334,096</u>
Total	206,851	192,286	93.0	\$5,933,087
				<u>\$5,220,734</u>
				88.0

Sources: Section 15 reports of the Urban Mass Transportation Administration (UMTA), annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

a This operator contracted with a private contractor to provide a portion of the demand-response service in its area during fiscal year 1987-88. The operator did not report vehicle revenue hours for this service to the UMTA. Consequently, the vehicle revenue hours shown here include only the hours for demand-response service operated directly by SMART and do not include hours for contracted service.

b This operator did not report any contracted demand-response service to the UMTA for fiscal year 1987-88. The contractor's drivers provided 100 percent of the operator's vehicle revenue hours. The operator incurred demand-response operating costs such as maintenance and insurance.

c This operator did not report demand-response service to the UMTA for fiscal year 1987-88. However, it contracted with a private contractor to provide all of its demand-response service during that year.

Public transit operators do not contract with private contractors to provide more transit service for several reasons. Although the UMTA encourages public transit operators to contract with private contractors, Section 1609(c) of the Urban Mass Transportation Act of 1964, as amended, requires grant recipients to protect the interests of employees affected by the grants. It requires operators to preserve employees' rights, privileges, and benefits under existing collective bargaining agreements; continue collective bargaining rights; and protect individual employees against a worsening of their employment status. As a result, if contracting jeopardizes the job security or collective bargaining rights of public operators' employees, public transit operators may have to forego economies they could achieve by contracting with private contractors.

In addition, collective bargaining agreements may contain provisions that limit a public operator's ability to contract with private contractors if those contracts in some way threaten the security of the public operator's employees. For example, the labor agreement between the Southern California Rapid Transit District (SCRTD) and the Amalgamated Transit Union contains a provision that, except in emergencies, prohibits the SCRTD from contracting with private contractors for work normally performed by the SCRTD's mechanics. Further, an agreement between the SCRTD and the United Transportation Union specifies that nothing in the agreement should be deemed to preclude the operator from contracting for service, provided that contracting takes place only when there is not enough equipment or

bus drivers to perform the service and provided that contracting does not adversely affect the operator's existing employees.

Although provisions in these labor agreements appeared to provide some barriers to contracting, we asked the Office of the Legislative Counsel to determine whether the provisions legally precluded the SCRTD from contracting for transit service, thereby, disqualifying the SCRTD from receiving state transit assistance funds. (However, state transit assistance funds no longer play a large role in subsidizing public transit. For example, during fiscal year 1987-88, state transit assistance funds accounted for only 0.2 percent of the statewide transit operators' total revenues and subsidies.) The Office of the Legislative Counsel reviewed the state law regarding state transit assistance funds and the agreements between the SCRTD and the two unions and concluded that the labor agreements did not preclude the SCRTD from contracting with private contractors. Another public transit operator we reviewed had similar provisions in its labor agreements with the union representing its bus drivers. However, we did not request the Office of the Legislative Counsel to review all of the transit operators' labor agreements.

Another reason some public operators do not contract for more of their transit service is that they believe that benefits from contracting with private contractors to provide transit service are overestimated. For example, the San Diego Transit Corporation believes that the costs of administering contracts for transit operations are

extremely high--so high that the benefits of contracting do not outweigh the costs. Further, contracting for transit service moves the public transit operator one step away from direct control over service delivery. Many public operators believe that private contractors may not be able to provide the same quality of service. To meet public service goals, the public operators contend that they must consider more than economic factors when deciding whether to contract with private contractors for transit service.

COMPLIANCE WITH THE UMTA'S PRIVATIZATION REQUIREMENTS

The UMTA requires public transit operators receiving federal funds to establish and follow a process for considering private participation in the provision of public transit. The guidelines, appearing in UMTA Circular 7005.1, require operators' privatization programs to include notification to and early consultation with private contractors in planning any new or restructured service. Also, operators receiving UMTA funds must evaluate each of their routes at least every three years to determine whether a private contractor could provide the service on these routes more cost-effectively than the transit operator. In addition, operators must establish a process through which parties can object to the decisions operators make to provide transit services themselves or to contract with private contractors.

As of January 1988, the UMTA had reviewed four of the eight transit operators we reviewed in more depth. These four operators are the San Diego Transit Corporation, the Southern California Rapid Transit District, the Alameda-Contra Costa Transit District, and the San Mateo County Transit District. Although only one of the four operators contracted with private contractors for a significant percentage of the bus service provided in their areas, the UMTA concluded that all four operators complied with its privatization requirements.

VI

BUS DRIVER HIRING AND TRAINING PRACTICES AND OTHER RELATED INFORMATION¹

In our review of the hiring and training practices of four public transit operators and the private contractor with which one of these public operators contracted, we noted practices common to all four operators and the contractor. For example, their hiring practices required applicants to have reached a minimum age, to possess a valid California driver's license, to provide a driving history printout from the California Department of Motor Vehicles (DMV), and to undergo a physical examination (including a substance abuse test) and a criminal history check. We also found common elements in the four operators' and the contractor's initial training programs for student drivers, such as classroom instruction, training on a bus, progress tests, and written examinations. The total number of hours for the initial training programs ranged from 200 to 296 training hours. Although the initial training programs for student bus drivers were similar for the operators and the contractor, there were some differences in the operators' and the contractor's remedial and advanced training programs for bus drivers. For example, two public operators required their bus drivers to complete training courses in interpersonal skills, and three of the operators and the contractor required bus drivers to take a remedial course after having one or two preventable accidents. Some of

¹See the Appendix for definition of technical terms used.

the public operators and the private contractor also required drivers to complete remedial courses whenever driving skill deficiencies were noted or when the operator or private contractor received a complaint against the driver. In this chapter, we also provide information on the four operators' preventable accidents and data on the wages and benefits paid by the four operators and the contractor. We noted that, from fiscal year 1985-86 through fiscal year 1987-88, the number of preventable accidents decreased slightly for three of the operators for which we had complete data. We also noted that bus driver wage and benefit payments varied among the four operators and the contractor during fiscal year 1987-88.

BACKGROUND

The purpose of bus driver hiring and training programs is to ensure that transit operators have sufficiently skilled and responsible bus drivers to meet the operators' service schedules in a safe manner. Transit operators themselves recognize the importance of establishing effective hiring practices. In a report by a Northern California regional transit association, dated September 1986, a committee of seven public operators identified elements their personnel managers should consider implementing in their selection processes. The recommended elements included background screening, physical examinations, and tests for skills in human relations.

We reviewed the hiring and training practices of the Southern California Rapid Transit District (SCRTD), the Alameda-Contra Costa Transit District (AC Transit), the San Diego Transit Corporation (SDTC), the San Mateo County Transit District (SamTrans), and the one private contractor to SamTrans for fiscal year 1988-89. This private contractor provided 31 percent of the bus service in the public operator's area. We also reviewed preventable accident data for the four public operators. We obtained data on the number of preventable accidents that the public operators were involved in from fiscal year 1985-86 through fiscal year 1987-88. However, the SDTC could only provide data for one and one-half years. Moreover, because some of the operators' records were insufficient, we did not attempt to correlate training with the preventable accident data. Further, we did not attempt to compare the number of preventable accidents for one operator with the number for another because we could not be certain that the operators' drivers were working under similar conditions. Finally, we obtained bus driver wage and benefit information for the four operators and the private contractor for fiscal year 1987-88.

THE FOUR OPERATORS AND THE CONTRACTOR
GENERALLY HAD SIMILAR DRIVER
REQUIREMENTS AND PROCEDURES

The four public transit operators and the contractor we reviewed required job applicants before becoming bus drivers to obtain a Class II driver's license, as required by the California Vehicle Code, Section 12804. A Class II driver's license is a commercial motor

vehicle license that applies to a driver of any motor vehicle with three or more axles. A Class II license is only valid with a current medical certificate that shows that the driver is in good physical condition as certified by a licensed physician.

Applicants for Class II licenses must take both a written and a driving test administered by the DMV. However, in some cases, when applying for a Class II license, the applicant, instead of taking a driving test, may submit a certificate of driving experience or training signed by the applicant's employer. The employer must be authorized by the DMV to issue such certificates. In addition, Title 13, Section 100.08(d) of the California Code of Regulations states that an operator or employer authorized to issue such certificates must ensure that each of its drivers participates in a driver testing and training program that includes a driving test. Each of the four transit operators and the contractor we reviewed participated in this program.

Class II licenses can be issued to qualified persons 18 years of age or older. However, according to Section 12515(b) of the California Vehicle Code, persons hired for commercial driving must be at least 21 years of age.

Effective January 1, 1989, new federal and state laws and regulations established requirements for those operators or employers wishing to continue issuance of certificates of driving experience or

training. For example, in addition to the previous program requirements, the operator or employer must give student bus drivers a road test that meets the requirements and standards used by the DMV to test commercial drivers. The operator or employer must also maintain training records for each driver who has been issued a certificate under this program and must permit the DMV to select and test a sample of those drivers previously examined and certified by the operator or employer. However, we did not review for compliance with the new requirements since they were not within our review period.

The four public transit operators and the private contractor had several elements of the hiring process in common. For example, to apply for a job as a bus driver with any of the four operators or the contractor, an applicant was required to have reached a certain age and to possess a valid California driver's license. The minimum age requirement of the four operators and the one contractor ranged from 21 to 25 years of age. Also, the four operators and the contractor required their applicants to pass a physical examination, including a substance abuse test, before being hired. In addition, they required that each applicant provide a driving history printout prepared by the DMV. Although each operator and the contractor reviewed the driving history of each applicant to ensure that the applicant had not been convicted of serious or numerous violations of the California Vehicle Code, the operators and the contractor differed in the types and number of violations they were willing to accept. For example, the four public operators had provisions for disqualifying applicants who were convicted of driving under the influence of alcohol or drugs.

Moreover, to ensure that applicants had not been convicted of serious crimes, all four operators and the contractor obtained a criminal history check for each applicant who had reached a certain stage in the hiring process. However, the operators and the contractor again differed in the types and number of convictions they were willing to accept. For example, while the private contractor judged each applicant's criminal history on a case-by-case basis, one of the operators employed a more structured approach. The public operator with the more structured approach sent applicants' fingerprints to the California Department of Justice for a criminal history check and would not accept any applicant who had been determined to be a mentally disordered sex offender, convicted of a narcotics offense within four years of the date of application, convicted of driving under the influence of alcohol or drugs within three years of the date of application, or convicted of any such offense more than twice during the applicant's driving career.

In addition, some of the public operators and the private contractor further screened applicants beyond the common elements of the hiring process used by all four operators and the contractor. For example, three of the four operators and the contractor had either a transportation or a personnel representative, or both, interview the applicant. Three of the operators and the contractor also checked applicants' references from previous employers as part of the hiring process. Further, the four public operators tested their applicants' ability to perform specific tasks such as making change, reading time

schedules, and filling out accident forms. Also, two public operators required a psychological evaluation of their applicants. See Volume 2 for a more detailed discussion of each public operator's hiring practices and requirements.

THE FOUR OPERATORS AND THE
CONTRACTOR HAD SIMILAR TRAINING
PROGRAMS FOR NEW BUS DRIVERS

We also found that the four public transit operators and the contractor had common elements in their training programs for student bus drivers. The operators and the contractor gave their student bus drivers classroom instruction as well as training on a bus. The total number of hours of classroom instruction ranged from 41 hours to 129 hours and the total number of hours of training on a bus ranged from 106 hours to 243 hours. Table VI-1 shows the number of hours of each type of training provided by each operator and the contractor.

TABLE VI-1

**NUMBER OF HOURS FOR INITIAL TRAINING PROGRAMS
FOR STUDENT BUS DRIVERS OF
FOUR PUBLIC TRANSIT OPERATORS
AND ONE PRIVATE CONTRACTOR
FISCAL YEAR 1987-88**

	<u>Number of Classroom Training Hours</u>	<u>Number of Hours Training on a Bus</u>	<u>Total Number of Training Hours in Program</u>
Transit Operators			
Southern California Rapid Transit District	54	173	227
Alameda-Contra Costa Transit District	41	159	200
San Diego Transit Corporation	53	243	296
San Mateo County Transit District	129	106	235
Private Contractor	68	152	220

Classroom training covered topics such as operator or employer policies and procedures, fare structure, and defensive driving techniques. During their training on a bus, students drove buses and observed instructors, regular drivers, and other students driving buses in various sectors of the operators' or contractor's service areas. In addition, the operators and the contractor required student bus drivers to pass various progress tests and written examinations to successfully complete the initial training and be hired as bus drivers.

After student bus drivers had successfully completed the operators' or contractor's initial training programs, the operators or contractor certified, through the authority granted by the DMV under the California Vehicle Code, Section 12804(e), that their students had completed their training in the operation of the types of equipment covered by the necessary Class II license. After the students then successfully completed the written examination for the Class II license, the DMV issued the students their Class II licenses.

ADDITIONAL BUS DRIVER TRAINING
COURSES VARIED AMONG THE
OPERATORS AND THE CONTRACTOR

Although the initial training programs for student drivers were similar for the four public transit operators and the contractor, there were some differences in the operators' and the contractor's remedial and advance training programs for bus drivers. Remedial courses are intended to improve or refresh a bus driver's driving skill because of a deficiency in the skill or because of extended periods of not using that skill. Bus driver advance training courses further improve a driver's skill in operating a bus.

Although all four operators and the contractor required bus drivers who had been absent for extended periods of time to complete a remedial training course, the operators and the contractor had different requirements regarding the length of time a bus driver could be absent before retraining would be required. For example, one public

operator required any bus driver who had been absent for six months but less than 12 months to complete a 16-hour remedial training course. However, if the bus driver had been absent for more than 12 months but less than 18 months, the driver had to complete a 24-hour training course. If the driver was absent for 18 months or more, the mandatory remedial course was 40 hours. In contrast, another public operator required its drivers, on a recommendation from its transportation department, to complete one hour of retraining after a long absence. The operator did not specify the length of absence that would warrant retraining.

Moreover, three of the operators and the contractor had remedial courses for bus drivers who had been involved in one or two preventable accidents. The number of training hours required for these courses ranged from 4 hours to 24 hours. Some of the operators and the contractor also required drivers to complete remedial courses whenever driving skill deficiencies were noted or when the operator or contractor received a complaint against the driver. In addition, two of the public operators required their bus drivers to complete courses on interpersonal skills. For example, one of the operators required that its drivers complete a course that emphasized sensitivity for the mobility impaired, senior citizens, the disabled community, and youth ridership. The required course also reviewed revenue collection and safety.

The operators and the contractor not only provided training classes but also evaluated their bus drivers' performance. All four operators and the contractor conducted road and ride checks to monitor their drivers' performance while the drivers were on the road. In addition, two of the operators and the contractor conducted standard periodic evaluations of their drivers' overall performance. See Volume 2 for a more detailed description of each public operator's training program.

THE NUMBER OF PREVENTABLE ACCIDENTS
DECREASED FOR THREE PUBLIC OPERATORS

In addition to our review of the additional training used to ensure safe driving practices, we examined the number of preventable accidents that the bus drivers for four of the public operators were involved in over a certain time period. One operator could only provide one and one-half years of preventable accident data. Of the three public operators that had preventable accident data for fiscal year 1985-86 through fiscal year 1987-88, each achieved a slight decrease in the average number of preventable accidents per driver for drivers who had such accidents. For the three operators, in fiscal year 1987-88, the average number of preventable accidents per driver for drivers who had such accidents ranged from 1.10 to 1.24 as compared with 1.13 to 1.31 in fiscal year 1985-86. Finally, the number of vehicle miles between preventable accidents for the three public operators generally increased. The vehicle miles between preventable

accidents ranged from 60,049 vehicle miles to 140,175 vehicle miles in fiscal year 1987-88 as compared with 53,141 vehicle miles to 125,806 vehicle miles in fiscal year 1985-86. We present more detailed preventable accident data for each of the three operators in Volume 2.

**BUS DRIVER WAGE AND BENEFIT PAYMENTS
VARIED AMONG THE FOUR OPERATORS
AND THE CONTRACTOR**

Among the four public transit operators and the contractor, bus driver wage and benefit payments varied during fiscal year 1987-88. Table VI-2 shows the wages and health benefits paid to student bus drivers, entry-level bus drivers, and bus drivers earning maximum wages for July 1987. AC Transit, the SDTC, and SamTrans required that entry-level bus drivers began as part-time drivers before becoming full-time drivers.

TABLE VI-2

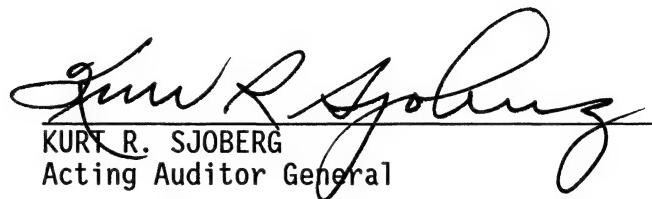
**WAGES AND HEALTH BENEFITS PAID TO BUS DRIVERS
BY FOUR PUBLIC TRANSIT OPERATORS AND ONE PRIVATE CONTRACTOR
FOR JULY 1987**

		Public Operators			<u>Private Contractor</u>
		Southern California Rapid Transit District	Alameda-Contra Costa Transit District	San Diego Transit Corporation	
<u>Student Bus Drivers:</u>					
Wages per hour	\$7.79	\$4.06		\$5.35	\$5.07
Health benefits ^a	None	None		None	Not paid during training
					None
<u>Entry-level Bus Drivers:</u>					
Wages per hour	\$10.62	\$10.99		\$9.88	\$10.09
Health benefits ^a	\$95.00 a month for a health and insurance benefits trust if part time; \$318.00 a month if full time	None		None	50 percent of premium for health and dental plans
<u>Bus Drivers Receiving Maximum Wages and Benefits:</u>					
Wages per hour	\$14.16	\$14.27		\$13.17	\$13.45
Health benefits ^a	\$318.00 a month for a health and insurance benefits trust	100 percent of cost of health plan and 90 percent of dental plan		\$1.56 to go to a health and welfare fund for each hour an individual employee works	100 percent of premium for health and dental plans

^a We have provided health benefit data for information only. Health benefit data for each of the operators are not comparable.

We conducted this review under the authority vested in the auditor general by Section 10500 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,



KURT R. SJÖBERG
Acting Auditor General

Date: September 11, 1989

Staff: Samuel D. Cochran, Audit Manager
Steven M. Hendrickson
Wendy T. Rodriguez, CPA
John Paul Albers
Ann K. Campbell
Sandhya Bhate
Russell W. Hayden
Ronald Kral
Raul Bernie Orozco
Barbara A. Ruona, CPA
Deborah L. D'Ewart
Lisa A. Foo
William E. Lewis
Michael R. Smith
Eric D. Thomas
Marshall L. Wesson

APPENDIX

GLOSSARY OF TERMS

Term	Definition
Amortization	The allocation of the cost of an intangible asset, such as a patent or goodwill, over the life of an asset.
Bus Service	Bus services provided according to regular schedules over prescribed routes.
CPI	See "Consumer price index."
Consumer price index (CPI)	A measurement of changes in the retail prices of a constant selection of goods and services. We use as measures of inflation changes in the consumer price indexes of the U.S. Department of Labor, Bureau of Labor Statistics.
Demand-response service	A transit service that provides trips generated by calls to the transit operator from passengers or their agents. The operator then dispatches vehicles to pick up and transport the passengers to their destinations.
Depreciation	The reduction in the value of a tangible asset, such as a building or bus, because of wear and tear or obsolescence. Such wear and tear is accounted for by the allocation of the cost of the tangible asset over the life of the asset.
Effectiveness	The degree to which the goals of an organization are met.
Efficiency	An organization is said to be efficient when it uses resources to provide an intended level of service with minimal waste.

Term	Definition
FTE Employee	See "Full-time equivalent (FTE) employee."
Federal subsidies	Federal cash grants and reimbursements.
Feeder	A branch line of a transport system.
Full-time equivalent (FTE) employee	Two thousand hours of work in one year equates to one FTE employee.
LACTC	See "Los Angeles County Transportation Commission."
Layover	Bus driver rest period.
Local Transportation Development Act (TDA) subsidies	See "Local Transportation Fund."
Local Transportation Fund	A statutorily authorized fund established by a county under the Government Code, Section 29530, that provides a source of Transportation Development Act (TDA) funding for transportation purposes. Funds are derived from one-quarter cent of the 6-cent-per-dollar statewide sales tax and are allocated to each county according to the amount of tax collected in that county.
Los Angeles County Transportation Commission (LACTC)	A county transportation commission for Los Angeles County responsible for the allocation of Proposition A funds in Los Angeles County, approval of all Local Transportation Funds made by the Southern California Association of Governments (SCAG), and allocation of funds provided by the State Transit Assistance (STA) Fund in Los Angeles County.
MPO	See "Metropolitan planning organization."
MTC	See "Metropolitan Transportation Commission."
MTDB	See "Metropolitan Transit Development Board."

Term	Definition
Mechanical failure	Failure resulting from a mechanical problem, such as engine or axle failure, that takes a bus out of service.
Metropolitan planning organization (MPO)	Organizations responsible for coordinating transportation planning in urban areas.
Metropolitan Transit Development Board (MTDB)	A board created to plan, construct, and operate public transit and to perform short-range transit planning in the San Diego area. The MTDB provides bus and rail service through the San Diego Transit Corporation and the San Diego Trolley.
Metropolitan Transportation Commission (MTC)	A commission that provides comprehensive regional transportation planning and programming for the nine-county San Francisco Bay Area.
Nonmechanical failure	Bus failure caused by problems such as vandalism or road hazards.
Operating costs	All operating expenses excluding depreciation and amortization.
Operating costs per passenger	Operating costs divided by total passengers.
Operating costs: services	Costs for labor and other work provided by outside organizations. Includes advertising fees, temporary help, custodial services, and security services.
Operating expenses	All expenses related to vehicle operations, vehicle maintenance, nonvehicle maintenance, and general administration. Includes depreciation and amortization.
Operator	Any entity responsible for providing public transit services.
Other local subsidies	Funds from taxes levied directly by the transit system, local cash grants and reimbursements (excluding the Local Transportation Fund), local special fare assistance, and subsidies from other nontransit operations.

Term	Definition
Other operating costs	Costs including utility costs, casualty and liability insurance costs, taxes, miscellaneous expenses (for example, for dues, subscriptions, travel, and meetings), and lease and rental costs.
Other revenue	Revenue other than passenger fare revenue, consisting of special transit fares (for example, revenues earned for rides given in regular transit service but paid for by some organization other than the rider), school-bus service revenues, freight tariffs, charter service revenues, auxiliary transportation revenues (for example, advertising revenues), and nontransportation revenues (for example, investment income).
Passenger fare revenue	Revenue earned from carrying passengers along regularly scheduled routes. Includes parking revenues.
Passenger miles	Total number of miles traveled by passengers on transit vehicles.
Passengers	The total number of passengers who board public buses, including passengers paying cash fares upon boarding, passengers showing passes, and passengers boarding with transfers. Passengers are counted each time they board a bus even though more than one bus may be used for a single journey from the starting place to the final destination.
Peak fleet	Number of buses needed to meet transit service demand during the busiest periods.
Peak period service	The level of service needed to meet transit service demand during the busiest periods.
Performance indicator	A ratio measuring transit performance, such as operating costs per passenger.
Performance statistics	Data used in calculating performance indicators.

Term	Definition
Preventable accident	Any accident in which the driver failed to do everything reasonable to prevent or avoid the accident.
Proposition A (Los Angeles County)	A proposition, approved in 1980, that allows the Los Angeles County Transportation Commission (LACTC) to impose a one-half cent sales tax in the County of Los Angeles for public transit purposes.
Proposition 13	A constitutional initiative, approved in 1978, that includes a limitation on the amount of property taxes that can be collected by local governments.
Public transit	Bus transportation services provided to the general public.
Purchased transportation	Transportation service purchased by an operator from a public or private transportation provider.
RTPA	See "Regional transportation planning agency."
Regional transportation plan	The transportation plan of a regional transportation planning agency (RTPA).
Regional transportation planning agency (RTPA)	Section 29532 of the California Government Code created these organizations, which are responsible for the regional coordination of transportation and the administration of performance audits required by the Transportation Development Act. This section also allows for the designation of councils of government or local transportation commissions as RTPAs.
Revenue passengers	Passengers from whom a fare is collected. Excludes free transfers of passengers.
Revenue service	A bus is in revenue service when the bus is available to the public with a reasonable expectation of carrying passengers.

<u>Term</u>	<u>Definition</u>
Revenue vehicle	A bus available to operate in revenue service.
Ridership	See "Passengers."
Road call	When a bus, while in service, experiences a mechanical or nonmechanical failure that requires attention from someone other than the driver to restore the bus to an operating condition.
SANDAG	See "San Diego Association of Governments."
SCAG	See "Southern California Association of Governments."
STA	See "State Transit Assistance."
San Diego Association of Governments (SANDAG)	An association that functions as the San Diego regional transportation planning agency (RTPA) and metropolitan planning organization. Develops long-range plans and provides technical support to operators and agencies.
Scheduled bus service	See "Bus service."
Southern California Association of Governments (SCAG)	The metropolitan planning organization and the regional transportation planning agency for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.
State subsidies	State cash grants and reimbursements and state special fare assistance.
State Transit Assistance (STA)	A fund, the creation of which is required by Section 99313.6(a) of the Public Utilities Code, which provides a source of Transportation Development Act (TDA) funding for transit operations, streets, and roads. Funds are derived from the statewide sales tax and are allocated according to population density and operator revenues for the prior fiscal year.

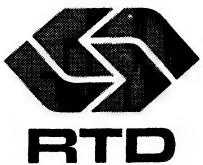
<u>Term</u>	<u>Definition</u>
TDA	See "Transportation Development Act."
Total fleet	Total buses in the fiscal year-end fleet consisting of revenue-producing buses and buses temporarily out of service for routine maintenance and minor repairs.
Transportation Development Act (TDA)	This act, the Public Utilities Code, Section 99200 et seq., is titled the Mills-Alquist-Deddeh Act. The act provides two major sources for the funding of public transportation; the county Local Transportation Fund (local TDA subsidies) and the regional State Transit Assistance (STA) Fund.
UMTA	See "Urban Mass Transportation Administration."
Urban Mass Transportation Administration (UMTA)	An agency established by the federal government under the Urban Mass Transportation Act of 1964 to provide financial assistance to transit operators for operating expenses, the construction or leasing of facilities, and the acquisition of equipment.
Vehicle maintenance cost	Expenses related to the maintenance and repair of vehicles, including revenue, service, maintenance, and administration vehicles.
Vehicle maintenance costs per bus	Vehicle maintenance costs divided by the number of buses in a total fleet.
Vehicle miles	Total distance traveled by buses, including miles traveled to or from revenue service.
Vehicle miles per bus	Total vehicle miles divided by the number of buses in a total fleet.

<u>Term</u>	<u>Definition</u>
Vehicle revenue hours	Total number of hours that each bus is in revenue service, including layover time but excluding time traveling to and from revenue service.
Vehicle revenue miles	Total number of miles that each bus is in revenue service, excluding miles traveling to and from revenue service.

**RESPONSES TO VOLUME 1
OF THE OFFICE OF THE AUDITOR GENERAL'S REPORT**

The following are the responses, from six of the eight public transit operators we reviewed in depth, to Volume 1 of the Office of the Auditor General's report. Two operators, Torrance Transit System (Torrance) and Stockton Metropolitan Transit District (SMART), did not respond to Volume 1 of the report.

We have provided footnotes to the responses of the Southern California Rapid Transit District (SCRTD) and the San Mateo County Transit District (SamTrans) to provide clarification or additional explanation. The footnotes immediately follow the responses of these two operators.



Alan F. Pegg
General Manager

August 25, 1989

Kurt R. Sjoberg
Acting Auditor General
State of California
600 J. Street, Suite 300
Sacramento, CA 95814

Dear Mr. Sjoberg:

Following are our responses to the report entitled "A Review of Public Bus Operations in California" Volume I.*

The report, A Review of Public Bus Operations in California (2 volumes), provides an accurate representation of SCRTD performance for the period from FY84 through FY88. Because of its size, serving nearly one-half of all passengers carried by public bus operators in California by FY88, the District has a significant impact on statewide statistical data. Among the observations made in the report, it is noted that the District serves 7.3 times as many passengers as the next largest operator (Vol.I, pg.i-10) in an urban area that is more congested than most (chart II-1,pg.II-11). Yet it provides this level of service at a lower cost per passenger than most operators (chart II-2, pg.II-14) and at a higher level of equipment utilization as characterized by passengers carried per revenue hour (Vol.I, pg.II-20).

Funding constraints limit the proportion of the District's operating costs which can be supported by available subsidies (Table I-8, pg.I-25) forcing the District to rely more heavily on passenger fares as a means of financing its operation (Table I-7, pg.I-24). This adds to the difficulty of attracting a higher level of transit usage in Los Angeles County. Page I-27 of Volume I describes the lesser rate of increase in TDA subsidies, and the decline in local subsidies, experienced by larger operators such as the District when compared with funding available from these sources to smaller operators. The report offers no explanation for this finding citing a review

*The Office of the Auditor General's comment: This letter also includes the operator's response to Volume 2.

of local funding allocation procedures as being beyond the scope of the study effort. A partial explanation for this finding is provided in Volume II, pg.I-7, which explains to a limited extent the decline in Proposition A sales tax revenue available for operations of the District. It should be noted that this decline was an express element of the implementation of Proposition A which established, beginning in FY86, a set-aside of 35% of Proposition A revenues for rail construction programs, and a corresponding elimination of operating subsidies expressly for the purpose of maintaining the \$.50 fare imposed during the first three years of Proposition A implementation. The lesser rate of growth of TDA subsidies available to the District is a direct result of two local funding allocation decisions. First, the District receives all federal Section 9 operating subsidies available to Los Angeles County as a means of lessening the administrative reporting requirements of municipal operators within the County. The District contributes a portion of its locally allocated TDA revenues to these municipal operators as an offset for the federal funds which they otherwise would be entitled to receive under local funding allocation procedures. Secondly, during FY87 and FY88 the District was required to allocate a larger than normal share of its allocated TDA funding to capital programs in order to finance local matching requirements for federal grants for which local funds had been under-reserved in prior years.

Additional comments:

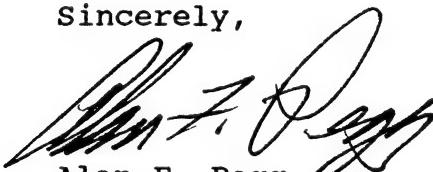
- (1) The table on page I-25 should be made into a chart and placed next to Chart II-4 on page II-19. This would present a more balanced picture than having the two sets of data separated in the report.
- (2) A "trial run" of the recommended changes to the TDA performance indicators on page II-26 should be made to determine the State-wide impact on funds distribution. We may not have any objection to the recommendation, but it would be better to have the data showing the impact before making a judgment. (1) *
- (3) A reference to graffiti and vandalism as a significant "cost driver" in the section beginning on page III-4 would be appropriate. (2)
- (4) The recommendation on page IV-13 does not acknowledge the procedures modifications already made by the RTD as referenced on page IV-7. Addition of a line to the recommendation which

*The Office of the Auditor General's comments on specific points begin after the response from the Southern California Rapid Transit District.

acknowledges that we have already taken steps to implement the recommendation would be appropriate. (3)

- (5) Despite the footnote disclaimer on Table VI-2 on page VI-13, the comparative data on Health Benefits presented on this chart is inappropriate. Either (a) the RTD and the private contractor data should be expressed in the same terms as the three other public operators, (b) the RTD and the private contractor data should be converted to the same base as the other public operators, or (c) the comparison should be removed from the table and a sentence included in the narrative on page VI-12 which states that comparison of benefits is not possible (much like the statement regarding correlation between training and preventable accidents contained on page VI-3).
- (6) Volume 2, pg. I-6
The report correctly states that the major factor contributing to the growth in labor costs are the increase in payments for workers' compensation. This is an area which merits further study by the State as costs are driven by State requirements.
- (7) Volume 2, pg. I-13
We would like the report to clearly indicate areas in which the District's performance was higher than that of the other operators. Specifically, our costs per passenger were almost one-third less than the State-wide average and our boardings per hour were Seventy percent higher than the State-wide average.

Sincerely,



Alan F. Pegg
General Manager

**THE OFFICE OF THE AUDITOR GENERAL'S COMMENTS
ON THE RESPONSE TO VOLUME 1 FROM THE
SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT**

- (1) We have not modified our recommendation to amend the California Public Utilities Code. This operator was the only one of the eight operators we reviewed that expressed any reservation about the recommendation. We recommend adding the performance indicators associated with vehicle revenue miles, which would prevent misperceptions of operator efficiency and economy. The extent (if any) to which a funding agency may link the recommended indicators to an operator's receipt of funds does not negate the need for relevant information on operator performance.
- (2) Text changed.
- (3) While we acknowledge that the operator adopted additional procurement policies after we completed our audit work, we did not audit the new policies. Therefore, we cannot state whether the new policies have corrected the procurement deficiencies we identified. Accordingly, we have not changed our recommendation.

AC Transit

Alameda-Contra Costa Transit District

1600 Franklin Street, Oakland, California 94612 □ (415) 891-4777

ALICE H. CREASON
PRESIDENT

RUTH GANONG
VICE-PRESIDENT

DIRECTORS

MICHAEL WINTER
WARD I

RUTH GANONG
WARD II

ALICE H. CREASON
WARD III

WILLIAM J. BETTENCOURT
WARD IV

LINDA SHEPARD
WARD V

ROY NAKADEGAWA
DIRECTOR AT LARGE

JOHN WOODBURY
DIRECTOR AT LARGE

Mr. Kurt R. Sjoberg
Acting Auditor General
State of California
660 J Street, Suite 300
Sacramento, CA 95814

Dear Mr. Sjoberg:

SUBJECT: Response to "Review of Public Bus Operations"

On behalf of Board President Creason I want to express our thanks to your staff for providing us with the opportunity to respond to your "Review of Public Bus Operations."

The District, Board of Directors, and staff have been working together diligently and steadfastly to improve the financial position of our agency. We welcome the comparisons with other transit districts and the presentation of the insights into our financial operations that were provided by your staff.

The Board of Directors and our staff are very serious about improving our finances and running an efficient operation. Again, we wish to express our thanks to the Office of the Auditor General in providing this analysis. It will be helpful to us in attaining our newly-adopted District mission "to meet people's transportation needs with cost-effective, quality service."

Sincerely,

BOARD OF DIRECTORS



Ruth Ganong
Vice President

RHG:bw

JAMES L. O'SULLIVAN
General Manager

August 25, 1989

Mr. Kurt Sjoberg
Acting Auditor General of California
660 J Street, Suite 300
Sacramento, California 95814

Dear Mr. Sjoberg:

Re: "A Review of Public Bus Operations
in California - Volume I"

The AC Transit staff has thoroughly reviewed your draft report entitled "**A Review of Public Bus Operations in California - Volume I,**" and wish to commend the Auditor General for the extensive review and compilation of data on public bus operations in the state and for providing historical financial, operational, and maintenance trends.

The District concurs with the Auditor General's recommendations to adhere to all State and Federal competitive procurement requirements.

The District has had a procurement policy that complied with all UMTA procurement requirements since the mid-1970's. That policy is currently being revised to include new UMTA and State regulations and to address some problem areas that have been identified in recent audits. A draft of the revised procurement policy was presented to our Board of Directors for review in late July, 1989. It is anticipated the Board will adopt the revised policy at the first meeting in September, 1989. We are currently revising our Procurement Manual to address the procurement of materials and supplies, professional services, inter-agency agreements, contract and RFP procedures, private sector operational services, construction and construction-related procurements, and specific guidelines for disposal and accountability of fixed assets, third-party contract audits, and other required policies and procedures that are deemed necessary.

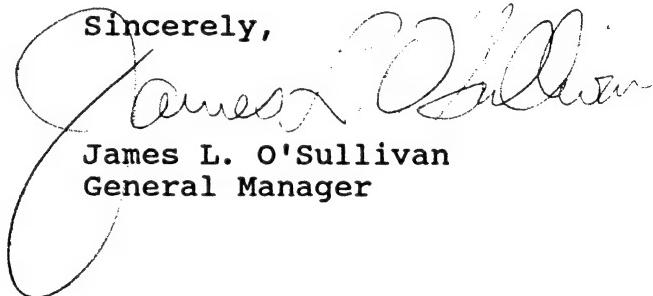
On July 26, 1989, the AC Board of Directors adopted District Fiscal Policies and a budget which established fiscal

Kurt Sjoberg
Volume I
August 25, 1989
Page 2

guidelines and a monitoring process for the expenditure of funds and procurement activities.

Please be assured that the District is continuing to carefully monitor its procurement practices for compliance with Federal and State regulations, as well as District policies. The District has recently established an Internal Audit Department. One of the responsibilities of the internal audit staff will be to monitor these activities.

The professional support and assistance that your office has provided in this effort is valued and appreciated.

Sincerely,

James L. O'Sullivan
General Manager

PYG:NH:nlc

San Diego Transit
An Operator in the Metropolitan Transit System



100 16th Street
P.O. Box 2511
San Diego, CA 92112
(619) 238-0100
FAX (619) 696-8159

August 22, 1989

Mr. Kurt R. Sjoberg
Acting Auditor General
660 "J" Street, Suite 300
Sacramento, California 95814

Dear Mr. Sjoberg:

San Diego Transit Corporation has received both volumes 1 and 2 of your draft report entitled "A Review of Public Bus Operations in California". We have reviewed both documents and find no exceptions to the report as it relates to San Diego Transit or state-wide trends.

As per our phone conversation this morning, the report can be finalized without any further response from San Diego Transit Corporation.

Very truly yours,

Ronald H. Yagura
Ronald H. Yagura
V.P. Finance Administration

RHY/dw

SamTrans

BOARD OF DIRECTORS

JOHN R. ASMUS
JERROLD D. BUCK
FRANK T. CANNIZZARO
MIRIAM L. GHOLIKELY
ARTHUR L. LLOYD
TOM NOLAN, Chairman
WILLIAM J. SCHUMACHER, Vice Chairman
WILLIAM J. STANGEL
ALBERT M. TEGLIA

GERALD T. HAUGH
General Manager

August 25, 1989

Mr. Kurt R. Sjoberg
Acting Auditor General
State of California
660 J Street, Suite 300
Sacramento, CA 95814

Dear Mr. Sjoberg:

The San Mateo County Transit District staff has thoroughly reviewed your draft audit report entitled "A Review of Public Bus Operations in California" (Volume I and II) and offers the following comments:

First, we were pleased to note the report confirms that the California transit industry performed admirably during a particularly difficult period characterized by diminishing federal and state subsidies, higher fares, low gasoline prices, favorable auto financing, a strong economy and increasing traffic congestion. These elements all adversely affect bus systems operations. Clearly, since the report centers on only two recommendations, it is indicative that California Public Transit Systems have performed well.

Second, we note that although the audit of SamTrans was extensive and took place over a long period of time, only one recommendation for corrective action has emerged. This does not surprise SamTrans given the strong emphasis it has placed on sound business practices over the years. However, as you well know, we do not fully agree with your conclusion criticizing certain of the District's procurement activities. Accordingly, the balance of our comments are devoted to a response to your observations on this topic.

We believe the report does not accurately or fairly portray the overall procedures of the District pertaining to procurement matters. It does not cite the fact that SamTrans has a set of comprehensive procurement procedures in place grounded on the basic principle that competitive quotes or competitive bids should be obtained whenever possible. The clear trend in recent years has been a marked increase in the number of competitive bid contracts awarded. Indeed the Board of Directors awarded 29 new contracts via the formal competitive bidding process in F.Y. 1987-88 alone. Our longstanding practice is consistent with your proposed Recommendation, which we therefore believe to be unnecessary. ① *

The need to place your recommendations in context becomes even more important when one considers that it is not a legal certainty that the service contracts highlighted in the report are required to be the subject of a competitive bidding process ② We submit the work

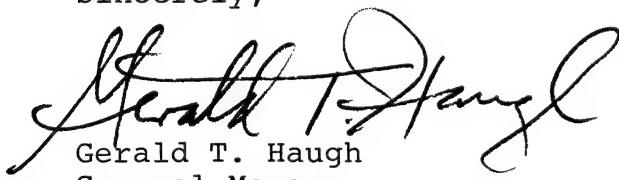
SAN MATEO COUNTY TRANSIT DISTRICT

*The Office of the Auditor General's comments on specific points begin after the response from the San Mateo County Transit District.

projects cited in the report are each individually difficult, if not impossible, to adequately define in specification form to enable competitive bidding since the basic work parameters are not quantifiable in advance.³ Accordingly, competitive proposals for these types of procurements would likely not produce an economic advantage.⁴ We again note that California case law clearly recognizes an exception from competitive bidding when the nature of the contract is such that competitive proposals would be unavailing or would not produce an advantage, and the advertisement for bids thus would be impractical. Although we respect your advice and will consider it carefully, our Staff and Attorney respectfully disagree with the legal conclusions you have drawn. We stand by our previously stated position that applicable law does not mandate competitive procurement procedures for such services.

We have attached hereto additional comments on the text and tone of the draft Report, which we discussed with your audit team on August, 24, 1989. Since we have been informed this afternoon by the audit team that our text suggestions will not be used, we are submitting them for inclusion in the final Report, Volumes I and II.⁵

Sincerely,



Gerald T. Haugh
General Manager

GTH/lml

Attachments

SamTrans

BOARD OF DIRECTORS

JOHN R. ASMUS
JERROLD D. BUCK
FRANK T. CANNIZZARO
MIRIAM L. GHOlikely
ARTHUR L. LLOYD
TOM NOLAN, Chairman
WILLIAM J. SCHUMACHER, Vice Chairman
WILLIAM J. STANGEL
ALBERT M. TEGLIA

GERALD T. HAUGH
General Manager

SamTrans Recommended Corrections
to the text of the draft Audit Report
"A Review of Public Bus Operations in California"

Volumes I & II

Volume I

S-1, Para. 2, Sent. 2 Should Read: ...of the public, the federal, state and to a much greater extent local governments provide subsidies to transit operators in California. (6)

S-2, Last Sent. Should Read: ...passenger fare revenue, local Transportation Development Act (TDA), and in several cases, local Sales Tax ...

S-10 Should Read: ...competitive procurement process in all (7) instances should continue to adhere ...

i-4, Para. 1, After 2nd Sent. Add: .TDA funds consist of one-quarter cent of the sales tax. These funds are redistributed to the county of origin.

I-10, Para. 1, Sent. 5 Should Read: In contrast, only one of the larger operators reported purchased transportation. (8)
(Strike Sentence 6).

SAN MATEO COUNTY TRANSIT DISTRICT

945 California Drive - P.O. Box 957
Burlingame, California 94011-0957 (415) 872-6748
Vol. 1 R-17

I-13, Table I-4 Note: SamTrans reports purchased transportation in its expense/revenue report under "Contract Services" with the sub-line item entitled "Greyhound Contract." By any other name, our Greyhound Contract is a purchase of transportation and should be reported as such in the state audit report. By showing these costs as services only distorts the facts. (8)

I-16, Para. 1, 4th Sent. Strike and replace with: SamTrans, as part of its labor settlement and to gain controls over absenteeism and Part-time Operator percentages increased these wages to make them more competitive with wages paid by other Bay Area transit operators. (9)

I-18, Para. 1 Note: Same comment as stated above (I-13, Table I-4). We are not sure of the point the auditors are trying to make. It appears that the audit team selected how to report SamTrans' Greyhound Contract cost. (10)

I-19, Para. 1, Last Sent. Delete: "according to one large operator" (this is easily verifiable). (11)

I-21, Table I-6 Recommendation: Include an additional table showing the same information for six larger operators. In the case of SamTrans, we do not reflect the trend of the 60 California transit operators. In fiscal year 1987-88 Federal

subsidies accounted for only 4.5 percent; State was zero percent; and local sources 95.5 percent. In addition, local sales tax increased from 26.0 to 37.9 percent from fiscal year 1984-85 to 1987-88.

I-26, Para. 1, Sent. 1 Comment: Should show the percent of local subsidies of three of the four larger operators in the sample. In the case of SamTrans, local subsidies in fiscal year 1987-88 accounted for 37.9 of its operating budget.

I-27, Para 2 Comment: Not clear as to what point the auditors are trying to make. TDA has nothing to do with the size of a transit operation. TDA is based on retail sales (sales tax receipts) and local (county) economies.

I-28 Comment: Should show how insignificant state and federal subsidies were in fiscal year 1987-88. (12)

III-11, Table III-1 Comment: Should footnote under fiscal year 1984-85, of the 311 buses listed for SamTrans, twelve of these vehicles were inactive. (13)

V1-7, next to last Sent. Correction ... Change 129 hours to 54 hours. Change 106 hours to 159 hours. (14)

V1-8, Table V1-1 Should Read:

	<u>Classroom</u>	<u>On Bus</u>	<u>Total</u>	(15)
SMCTD	54	186	240	
Private Contractor	39:15	163	202:15	

GENERAL COMMENTS:

1. Many of the comparisons should have been done with and without SCRTD. (16)
2. We do not agree with the Auditors selection of comparable transit agencies, i.e. San Diego, Long Beach and Santa Monica. In all cases these agencies are urban in nature whereas, SamTrans is strictly a suburban system. Comparable size is not a good criterion for comparison. Comparisons should only be made between operators whose service areas are similar, e.g. urban, suburban, rural; topography; land use; social-economic characteristics; local economy; financing, etc. (17)
3. The report minimizes the significance of local support. We know of at least eight counties that have had sales tax in place during F.Y. 1987-88 for transit purposes. They are: San Mateo, San Francisco, Santa Clara, Alameda, Fresno, Contra Costa, Los Angeles and San Diego. (18)
In addition, TDA is a locally generated funding source, and, more recently, several counties have enacted additional sales tax measures for transit related improvements. Contrast with Federal operating subsidies of less than five percent and State subsidies of less than one percent, locally generated funds are very significant.

**THE OFFICE OF THE AUDITOR GENERAL'S COMMENTS
ON THE RESPONSE TO VOLUME 1 FROM
THE SAN MATEO COUNTY TRANSIT DISTRICT**

- (1) The operator received federal operating subsidies during the period of our review and was, therefore, required to adhere to the Urban Mass Transportation Administration (UMTA) requirements on competitive procurement. Since the operator did not adhere to these federal requirements, the recommendation is necessary.
- (2) As cited in Chapter IV, UMTA Circular 4220.1A applies to the competitive procurement of services. Again, because the operator received federal operating assistance, it was required to follow UMTA Circular 4220.1A.
- (3) This statement is inconsistent with written documentation, provided to us by the district on February 17, 1989. According to this documentation, the operator has either competitively bid or plans to competitively bid 5 of the 12 exceptions we noted in our report.
- (4) We disagree. Contacting several vendors and obtaining price quotes or competitive bids would be more likely to produce an economic advantage than contacting just one vendor. In addition, UMTA Circular 4220.1A requires maximum free and open competition in the procurement of goods and services.
- (5) Based upon our discussions with the operator at the exit conference, we had already incorporated some of the operator's suggested changes into the report. However, as shown in the following footnotes, we did not change the report text in every case for the reasons described.
- (6) Text changed.
- (7) "Continue to adhere" implies that the three operators are adhering to all applicable competitive procurement requirements. This implication is contrary to our finding. However, we changed the text to state "that the three operators did not always follow a competitive procurement process . . ."
- (8) The operator did not report any "purchased transportation." Instead, the operator reported these costs as services when reporting to the State Controller's Office. Also, the district's audited financial statements reported the contract as services. We used the same classification that the operator did. We would recommend that, in the future, the operator classify these costs as purchased transportation in its external reports.
- (9) Text changed.

- (10) See footnote 8.
- (11) SamTrans is not the operator we cite.
- (12) Text changed.
- (13) For consistency among all the operators, we do not distinguish between active and inactive vehicles.
- (14) Our interpretation of the categories "classroom instruction" and "training on a bus" makes the suggested change inappropriate.
- (15) We determined the total number of training hours from documentation provided by SamTrans and the private contractor.
- (16) In Volume 1, we did assess the impact of the Southern California Rapid Transit District's (SCRTD) data on the statewide trends. Although we do not mention the SCRTD by name, we do highlight instances in which the SCRTD's data had a significant impact on the statewide trend; for example, refer to Volume 1, page I-4, second paragraph.
- (17) As cited in the Introduction of Volume 2, page i-4, we recognize the difficulty of precise comparisons among operators.
- (18) On page I-26 of Volume 1, we note that three of the four larger operators we reviewed received other local subsidies from an additional half-cent tax surcharge approved by county voters. We did not include the fourth operator (San Diego Transit Corporation) because it had not received this subsidy as of fiscal year 1987-88.



August 24, 1989

Mr. Kurt R. Sjoberg, Acting Auditor General
Office of the Auditor General
State of California
660 J Street, Suite 300
Sacramento, California 95814

Dear Mr. Sjoberg:

Reference is made to your letter dated August 17, 1989.

Omnitrans has received and reviewed the two draft copies of excerpts from your report entitled "A Review of Public Bus Operations in California (Volume 1)", and the two draft copies of excerpts from Volume 2 of the same report.

Thank you for the opportunity to comment on your report. Omnitrans is pleased to have been a part of your review. We are certain that the information contained therein will be informative and helpful in developing policies that will enhance and promote the future role of public transit in our state.

If you have any further questions, please contact John R. Cuevas, Administrative Assistant at (714) 889-0811.

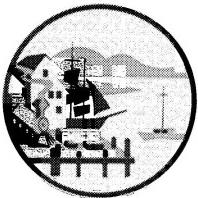
Sincerely,



Robert E. Chafin
General Manager

REC:JRC:bw
cc: Ron Kral

3530



CITY OF VALLEJO

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

August 24, 1989

Mr. Kurt Sjoberg, Acting Auditor General
Office of the Auditor General
660 J Street, Suite 300
Vallejo, CA. 95814

RE: Draft "A Review of Public Bus Operations in California, v. 1"

Dear Mr. Sjoberg:

Thank you for the City of Vallejo's opportunity to review and comment on your office's recent review of transit operations in California, which included Vallejo Transit as one of the sample systems examined.

We agree with the general conclusions drawn in the Summary of Volume 1 regarding why the average operating speeds of transit have dropped in California between FY 1984-85 and FY 1987-88. The relatively large 5.1% increase in vehicle hours compared to only 0.5% more vehicle miles is indeed directly related to increasing traffic congestion. For example, in the two years since Vallejo Transit began express bus service between Vallejo and the El Cerrito Del Norte BART station, average running times have increased between five and ten minutes over the twenty mile distance. We believe that the decrease in average transit speeds, tied with the large drop in the real cost of gasoline over the study period, caused the statewide drop of 13.1% in total passengers carried.

These trends indicate the vital need for transit priorities around California such as HOV lanes, signal preemption, ramp meter bypasses, traffic engineering changes, and similar measures. The need is particularly acute in congested urban corridors such as I-80 between Solano County and the Bay Area. Transit priorities will have the double benefit of relieving congestion while also improving transit's operating and financial effectiveness. We also believe your conclusions regarding maintenance cost trends, also included in the summary section of Volume 1, underscore the on-going need to adequately fund vehicle replacement programs. Timely replacement of older transit vehicles is vital to minimizing overall maintenance expenses.

City of Vallejo: Review of California Bus Operations, v.1
Page 2

Thank you for this opportunity to comment on your office's report regarding Vallejo Transit and other transit operations. If you require more assistance or information, please call me at (707) 648-4306.

Sincerely yours,



PAMELA BELCHAMBER
Transportation Analyst

cc: Director of Public Works
Anthony J. Intintoli, Mayor
Edward Wohlenberg, City Manager

cc: **Members of the Legislature**
Office of the Governor
Office of the Lieutenant Governor
State Controller
Legislative Analyst
Assembly Office of Research
Senate Office of Research
Assembly Majority/Minority Consultants
Senate Majority/Minority Consultants
Capitol Press Corps